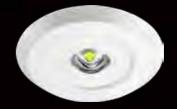
## **CPS 220/64/SV**



**Central Battery System and luminaires** 



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### **General information**

With the publication of this catalogue, all previous versions lose their validity. During the period of validity of this catalogue, we reserve the right to make technical and formal changes to our products in order to improve them or to take account of changes in legal regulations. We are pleased to provide current data on request.

All LED luminaires are supplied incl. LED illuminant.

Industrial property rights exist for a large part of the products.

Current product information can be found on our homepage at www. inotec-licht.de



## INOTEC Sicherheitstechnik GmbH Innovative Emergency Lighting Technology



INOTEC Sicherheitstechnik GmbH is an innovative midsized company based in Ense-Höingen, Westphalia, with its own development, design, production and national and international sales.

A competent team with flexible and committed employees provides reliable support in all questions concerning products, planning, service and regulations.

Since its foundation in 1995, INOTEC Sicherheitstechnik GmbH has developed into a globally active company with over 310 employees. Further jobs have been created with the numerous partners within Europe and Middle East. The production, storage and administration facilities in Germany have grown to around 14,000m<sup>2</sup>.

Today, INOTEC Sicherheitstechnik GmbH is one of the leading manufacturers in emergency and safety lighting. Modern, innovative and high-quality products "Made in Germany" set new standards worldwide, e.g. CLS 24 decentralised emergency lighting systems, central battery systems with JOKER technology and the dynamic escape route guidance D.E.R. system.





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#### Function of the JOKER technology



CPS 220/64

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Contents



INOView



Regulation and standards Special colours INOTEC LED technology



Luminaire

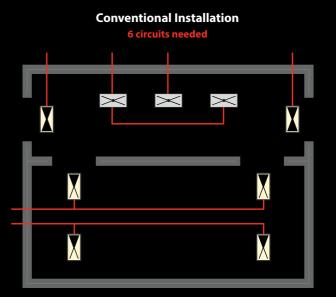
Contacts Luminaire categories

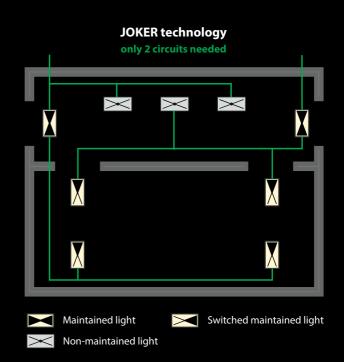




## Function of the JOKER technology

- On an INOTEC CPS 220/64/SV three switching modes can be operated simultaneously and mixed. In addition to the system, JOKER electronic ballasts, the standard ballasts for INOTEC safety and emergency exit sign luminaires, are required, or an INOTEC J/SV module is placed in series with a third-party electronic ballast. By means of dip switches, the desired switching mode and monitoring address are set at both components.
- JOKER technology, patented by INOTEC, simplifies the design and installation of emergency lighting systems and saves considerable costs. The example on the left shows the possible extent of reductions in the installation.
- For conventional installation with three required standard operating modes maintained (M), non-maintained (NM) and switched maintained (sM), 6 final circuits are required to supply 9 safety and emergency exit sign luminaires in this part of the building.
- JOKER technology allows the number of circuits to be significantly reduced. In this example only 2 circuits are necessary, because all switching modes can be combined within one circuit.
- The different switching modes are only active in mains operation. In the event of a power failure, all connected lights are supplied by the battery and switched on, regardless of the selected switching mode.







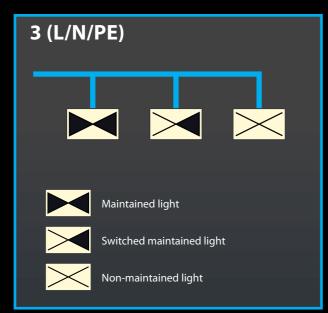




#### Advantages of JOKER technology

- Easy design of cable routing
- Reduced material costs
- Reduced installation time
- Better utilisation of the final circuits
- Subsequent or direct assignment of the switching mode to each luminaire

The CPS 220/64 provides three switching modes for emergency exit sign and safety luminaires in the same circuit without additional data lines.

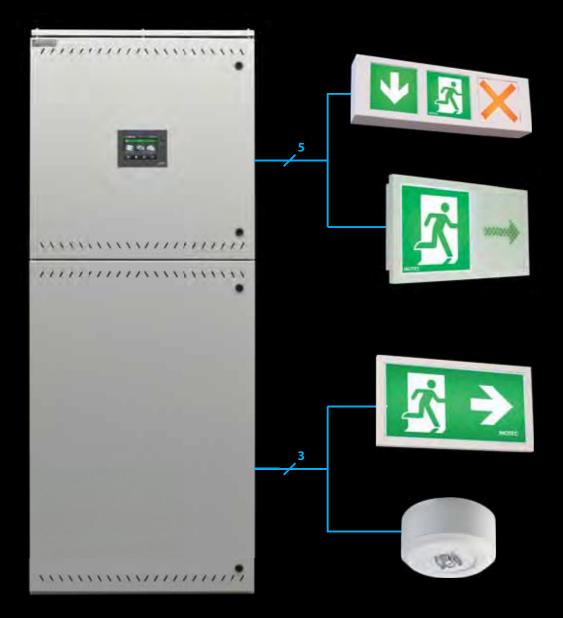




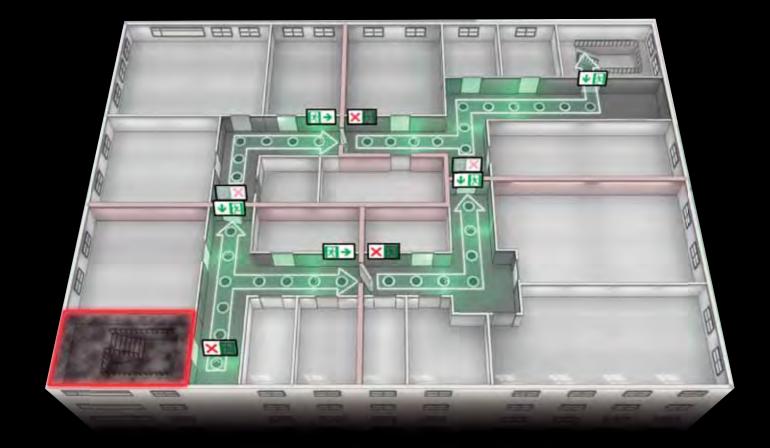


## Are escape routes always safe escape routes?

Using the CP D.E.R. 2x2.5A change-over device, the CPS 220/64 system provides additional dynamic control of low-level lighting and dynamic emergency exit sign luminaires via a BUS cable. If fire or smoke block the next escape route, these luminaires can indicate an alternative and safe evacuation route.







Dynamic escape route solutions are becoming more and more common for changes in the use of buildings or to compensate structural fire protection measures.

If an escape route cannot be used or can only be used in a limited way, a static marking may no longer fulfil its purpose. This may be the case, if escape doors are locked due to the special use of building parts (e.g. at events in schools).

Without an additional system, you can operate dynamic exit sign luminaires on a CPS 220/64. Structural requirements, the type and use of areas or buildings and regulatory and legal requirements can be easier achieved with CPS 220/64.

A maximum of 8 switch inputs can be assigned to each dynamic emergency exit sign luminaire on a CPS 220/64 to control the luminaire depending on the situation.





## کی Functionality

## System Layout and features

The modular design of the CPS 220/64 central battery system with different power ratings and cabinet sizes makes it possible to adapt to all project requirements. In case of an emergency, the safety and emergency exit sign luminaires are supplied by the sealed OGi block battery (216V DC).

The integrated controller checks the system continuously and monitors each connected luminaire (max. 20 addresses per circuit). An individual luminaire monitoring system in the central battery system detects and reports the failure of an individual luminaire including the stored location text. For each circuit, the type of monitoring (not monitored, circuit monitored, single luminaire monitoring) and operating mode are individually programmable.



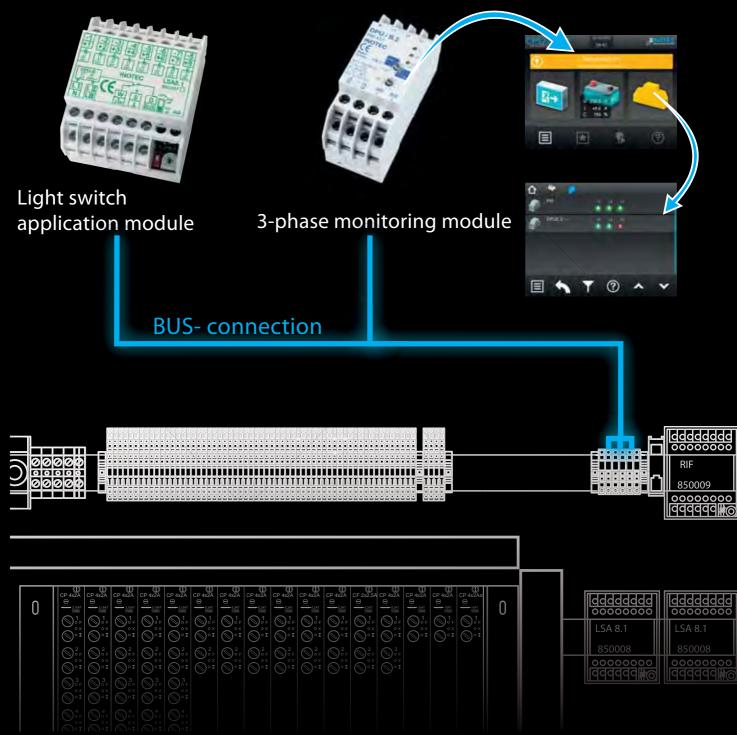
- Modular system design, various cabinet variants, battery racks or cabinets available
- Monitoring and supply of 20 addresses for up to 128 circuits with individual luminaire monitoring
- Low service costs by central monitoring of the entire safety lighting system and all connected luminaires
- Automatic or manually triggered function test which includes logbook for status and error information
- Insulation test device
- Disconnect terminals for simple insulation measurement of final circuits
- Patented JOKER technology: mixed operation of maintained, non-maintained and switched maintained light
- Location text displayed at controller down to luminaire level



## **External BUS components**

The functionality of the new CPS 220/64 can be extended by connecting external, bus-capable components such as light switch application modules (LSA) or three-phase monitoring modules (DPÜ). Especially the bus-capable three-phase monitoring module enables a detailed reporting of the faulty sub-distribution at the CPS 220/64 controller with forwarding the information to a connected monitoring system.

A phase failure can be used for selective switching of individual luminaires or the triggering of dynamic escape route scenes.





## **န**ြှို့ Functionality

## 230V-change-over-devices

#### Change-over-device for connection of 230V safety- and emergency exit sign luminaires

- Automatic monitoring function of the connected 230V luminaires
- Monitoring without additional data line
- Single luminaire or circuit monitoring with JOKER technology for each circuit programmable
- Assignment for up to 3 switching inputs







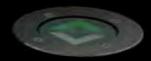
## 230V - D.E.R. change-over-device



Using the CP D.E.R. 2x2.5A circuit module for the CPS 220/64, it is also possible to operate, monitor and control 230V luminaires of our Dynamic Escape Route Guidance System D.E.R. on central battery system. Dynamic direction indicators with running light function in combination with the segment controller (SEV) and a regulated power supply (PSU) can also be operated with this module.

- Automatic function monitoring of the connected 230V-D.E.R. luminaires
- Assignment of up to 8 switching inputs per luminaire





The dynamic escape route luminaire with running light function, which are mounted at a low level, and the dynamic emergency exit sign luminaires are controlled to indicate safe escape routes in the event of a fire.





## 24V technology

## The 24V technology is now also available as a slot card for CPS 220/64. This makes it even easier for you to use the advantages of 24V technology.

- Automatic function monitoring of the connected luminaires
- Each luminaire individually programmable at the TFT controller
- Assignment of up to 2 switching inputs per luminaire
- Luminaires can be dimmed individually
- 2 output circuits with protection class III (SELV) for up to 20 luminaire addresses per circuit
- Luminaire addressing without address switch







The 24V slot card combined with new D.E.R. luminaires can be used to dynamically re-route escape routes in the event of a fire. A separate escape route guidance system with an independent D.E.R. controller is therefore no longer necessary.



Also available as BUS substation with the following additional functions:

- Integrated circuit seperating module
- Local 24V current loop
- Optimal for one fire compartment



System luminaires with 24V technology can be found in the CLS FUSION catalogue.





# **کی Functionality**

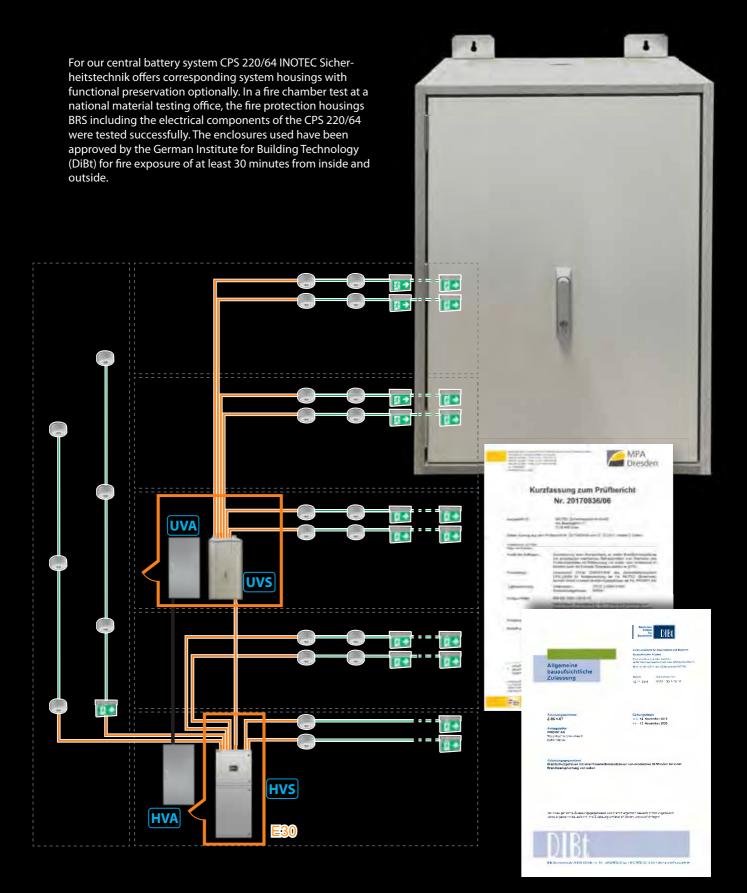


## Safe enclosure for safe operation

According to (M)LAR, safety lighting systems are safety-related systems. If these systems supply more than one fire compartment, the electrical wiring must be designed in accordance with (M)LAR 5.3.2. in the version of 20.05.2015 with a functional preservation of at least 30 minutes. This is not always possible with a separate room that is not used for other purposes. An alternative in accordance with (M)LAR 5.2.2. is to place the safety-related systems in an enclosure with appropriate functional preservation. For the enclosures, the function of the electrotechnical components of the distributor must be demonstrated in a structural proof of usability for the duration of the functional preservation in the event of fire.









# **Safety**

## Is your emergency lighting system always ready for use in an emergency?

Emergency lighting systems must be ready for immediate use in the event of an emergency, as they must enable safe evacuation of the building for the rated duration time in the event of a power failure. This requires not only constant monitoring of the safety and emergency exit sign luminaires and the switching technology, but also monitoring of the batteries used. Customary market systems are often just monitoring the symmetry of the battery set. The battery pack is divided into 9 blocks each. Individual block monitoring is not performed.

## 

### Failure types

#### Drying-Out

The electrolyte bound in the fleece or gel also dries out during normal operation. This is neither visible from the outside nor can it be prevented by maintenance. A battery block defect will result.



The heat generated e.g. by an internal short-circuit accelerates exothermic (heat-generating) reactions within the battery so that even more heat is generated. This can lead to the emission of smoke or flames or even an explosion of the battery block.

#### Plate short circuit

Out flushed material, which is gathered at the bottom of the battery, may cause a short circuit between the cells.

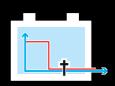
#### Sudden Death

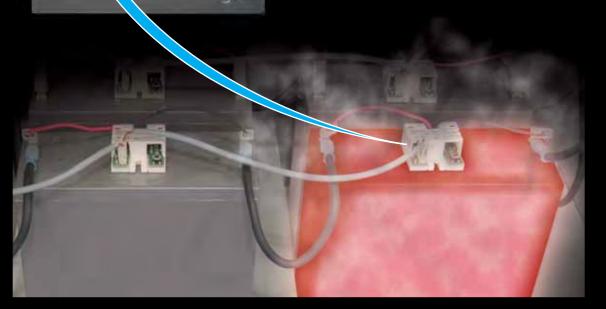
By corrosion at the connection between plates and the pole bolt the material thickness can decrease and finally break off. This leads to the so-called sudden death.













## Why to use a battery control system?

The INOTEC BCS-system monitors and logs voltage and temperature of each individual battery block.

If pre-defined limit values of an individual battery block are exceeded or not reached, fault messages are first sent and finally the charger is switched off.

Since all 18 battery blocks in a central battery system are connected in series, a single defective block can also destroy the remaining blocks over time. Therefore the early detection of a defective battery block is absolutely necessary. Otherwise, operational reliability is no longer guaranteed until the battery block is replaced. In the worst case, this can only be deter-

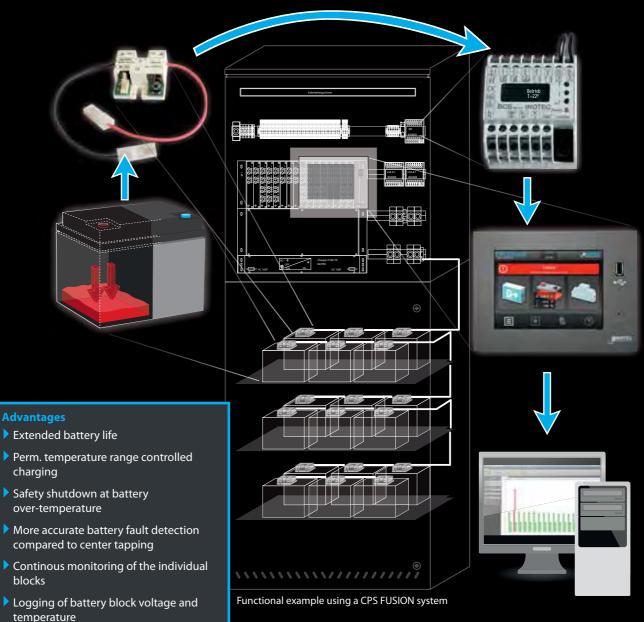
Safety shutdown of the charger and cancellation of a duration test in the event

of a fault

Battery data logging

mined during the next annual endurance test.

Even during a weekly function test, a single defective battery block is not detected. For the duration of the test, the energy of the remaining blocks is sufficient, but in the event of a longer power failure, this would lead to the failure of the entire battery system within a very short time.





# **Safety**

## Do you always document the required battery tests?

According to EN 50171:2001, the total voltage, charging current and ambient temperature of the battery set must be constantly monitored, but these values are not sufficient to determine the operating status of the battery.

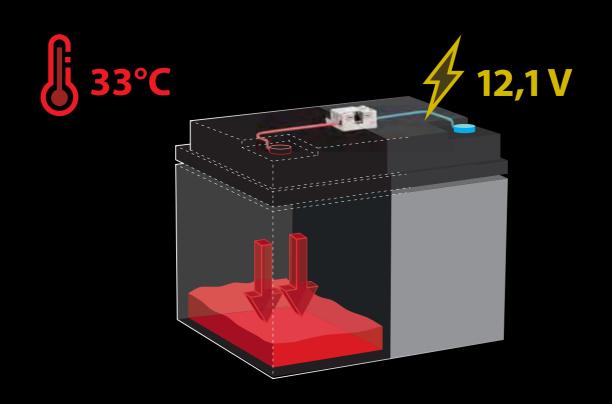
Accordingly, EN 62034:2013 requires an annual duration test to check the battery capacity over the entire operating period. The block voltage of the individual battery blocks is also to be measured.

This annual inspection only determines the condition of each individual battery block 365 days apart. It is impossible to give a statement about the condition of each battery block in the meantime.

The draft of EN 50171:2013 specifies that the voltage of each battery block has to be measured and recorded. If a system such as the INOTEC BCS system is used, this monitoring system must meet the following requirements:

- Periodic monitoring of the battery block voltages (6.11.3. a)
- Failure messages at a deviation of the battery block voltage (6.11.3. b)
- Only manual resetting of failure messages (6.11.3. d)
- Logging the battery block voltages during a duration tests in 5 minute intervals (6.11.3. f)
- Monitoring the battery temperature (6.11.)

The INOTEC BCS system already meets future requirements today and records the battery condition in the logbook of the system.





### **BCS View - A New View**

Using the convenient analysis software BCS View, the recorded data of the BCS system can be evaluated in detail. Diagrams clearly visualise the condition of the individual battery blocks during normal operation as well as during a duration test. Defective battery blocks can be easily located with the help of this intuitive software.

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The log of a dura	tion test clearly shows th	e decreasing average	dillin
	attory blocks (groop) over		

The log of a duration test clearly shows the decreasing average voltage of the battery blocks (green) over the duration of the test. Exceedances of the limit values are indicated in red. This immediately notifies the user of the need for verification when viewing the recorded data.

The data is read out from the TFT controller of the emergency system via a network connection or USB stick and visualised in the BCSView software. The BCS system logs the daily measurement data and the measurement data during a duration test in two separate test files.







## User-friendly operation

The modern graphical user interface of the TFT touch display of our central battery system CPS 220/64 allows a very comfortable and intuitive operation.

The habits of the users changed a lot due to smartphones and tablets. INOTEC takes up the concepts and simplifies the usage of your emergency lighting systems.

The 5" TFT-WVGA-Touch display of the CPS 220/64 shows all status information down to luminaire level. The graphic display has been optimised for finger operation.

As a result of the consistent user interface for our centralised and decentralised emergency lighting systems the user does not need to adapt to a different usage.





O X







## Control down to luminaire level

### Display of logbook at controller





## Versatility



The CPS 220/64 central battery system optimally meets your project requirements with its different rating classes and cabinet designs. Modularly equipped with 16 internal and 16 external slots with 1, 2 or 4 circuits, the system can be adapted to all customer requirements.

Increasing requirements for dynamic escape route guidance are easily realised with the CPS 220/64. The operation of dynamic luminaires in the same system with static luminaires simplifies planning and installation. Especially when controlling only one or two dynamic luminaires, there is no need to install a second system.





The 5" TFT-WVGA controller with graphic touch surface is built into the door of the electronic cabinet of the CPS 220/64 central battery system. This makes it possible to operate the emergency lighting system conveniently without opening the cabinet door. The integrated password protection prevents from unauthorised operation.

The new cable entry across the entire width of the cabinet allows the cables to be fed into the cabinet individually or in bundles. The sliding rubber seal simplifies the insertion of large cable cross-sections and seals the cable entry after installation. Inside the cabinet, the optimised design eliminates the need to jump to the terminals, resulting in a larger connection space.







## ွှ<mark>ို့</mark> Connectivity

Thanks to the multiple interfaces on the control unit of the CPS 220/64, this system offers a wide range of monitoring and programming options.

Using the standardised USB interface, information can be stored on a USB pen drive or the configuration of the system can be updated. The controller software can also be easily updated using USB.

The integrated network interface enables information to be transferred to monitoring systems. By default, the information can be accessed with a web browser via PC or mobile via INOWeb. All status information down to the individual luminaire fault are visualised. Of course, the central battery system can be monitored with the INOView software. The status of luminaires, BCS and connected components is clearly displayed in INOView with location information. Events are logged centrally in the logbook of all monitored systems. For faster localisation of the faulty luminaire, these are displayed in a floor plan with the current luminaire status.

Status messages to building management software can be sent via ModBUS/TCP. In this way, the information can be displayed down to the luminaire level in an existing building management system. Other standard building management system protocols such as OPC or BACnet can also be implemented by gateways.



### INOWeb



### INOWeb

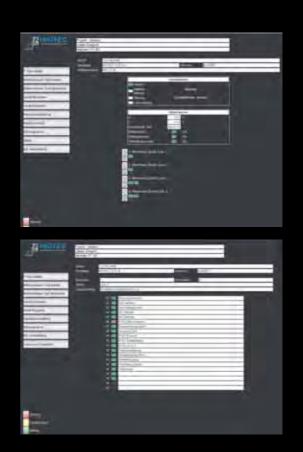
TFT-touch controller with integrated INOWeb function for central monitoring of the emergency lighting device via intra-/ internet. The connection works via an already existing network.

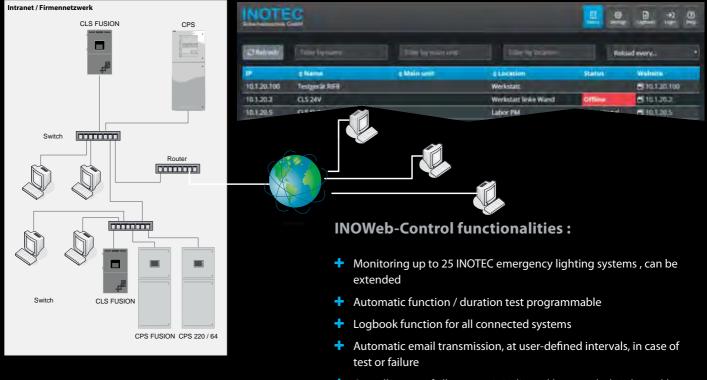
Monitoring of the emergency systems using a web browser to access the INOWeb functionality of the control unit. Every system, circuit and luminaire status can be monitored via the (optionally) password-protected website. With an existing internet connection the INOWeb can be accessed from any place world-wide. Please contact your regional sales team for a demonstration.

#### **Functions:**

- + Starting a function test/ battery duration test
- + Blocking /releasing
- + Failure printout
- + Linking files / websites by circuit

The INOWeb-Control software makes it possible to monitor even complex installations with different system types from a central location. Therefore the TFT-touch controller needs to be integrated in an existing network.



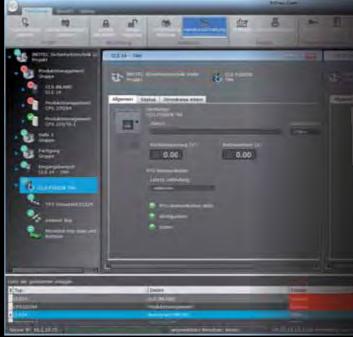


+ Overall status of all systems is indicated by a symbol in the taskbar



## Connectivity

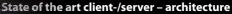
## **INOView - flexible monitoring**



INOView is the main monitoring solution for all INOTEC emergency lighting systems. This software is used wherever a flexible application is required that can grow with the project. The devices are monitored via a 3-core RTG bus and/or a network connection.

#### Everything in focus for personal safety in buildings

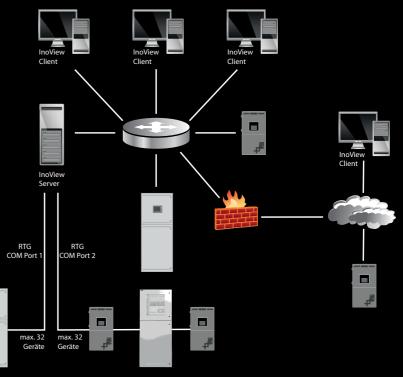
When developing the INOView visualisation software, we focused on the user. Simple, intuitive user interface and transparency by clearly structured system images and clear texts are important. With just one view, the user can see the overall status of the safety lighting system and, if necessary, quickly initiate measures to guarantee personal safety in the building. The INOView software ensures transparency and provides the user with comprehensive and detailed information on system operation.



A modern client/server architecture ensures future and investment security. The clients allow several users in the network to access the information of the INOView software simultaneously. An integrated user administration protects the software from unauthorised access.

#### Powerful and easy to use

With the INOView software, you have your emergency lighting systems clearly and safely "under control". Intuitive operating menus enable simple and convenient operation. Individually configurable visualisations of the information ensure transparency. The software grows with the size of the project. Whether a school or an airport, the INOView software is aligned to the requirements of the customer with modern standards.





## Planning example of a CPS system

1. Circuit design

Define circuits and used luminaires

Sum the nominal currents

SK 1.1	SNP 1530	SNP 1520	SN 9400 ALB	ΣI <sub>SK1.1</sub> = 0,264A
	18mA/5,2VA 7 pieces	14mA/4,1VA 3 pieces	12mA/3,5VA 8 pieces	S <sub>SK1.1</sub> = 76,7VA
	SNP 1530	SN 9400 ALB		
SK1.2				$\Sigma I_{SK1.2} = 0,21A$
581.2	18mA/5,2VA 5 pieces	12mA/3,5VA 10 pieces		S <sub>SK1.2</sub> = 61VA
	SNP 2130	S <u>N 80</u> 4	SN 6204	
SK1.3				Σ I <sub>SK1.3</sub> = 0,445A
	32mA/8,3VA	32mA/8,3VA	25mA/7,1VA	S <sub>SK1.3</sub> = 118,5VA
	4 pieces	6 pieces	5 pieces	
SK1.4	SN 6204	SN 2130		Σ I <sub>SK1.4</sub> = 0,328A
	25mA/7,1VA	32mA/8,3VA		S <sub>SK1.4</sub> = 90VA
	8 pieces	4 pieces		
				$\Sigma I_{SK2.1} = 0,416A$
SK2.1				S <sub>SK2.1</sub> = 112,9VA ΣI <sub>SK2.2</sub> = 0,506A
SK2.2				$S_{SK2.2} = 137,4VA$
•				•
•				•
SK11.4				Σ I <sub>SK11.4</sub> = 0,42A S <sub>SK11.4</sub> = 111,4VA
				otal current = 21.5A I power = 6.125KVA



# Design example for emergency lighting with a CPS system

#### 2. Calculation of battery / ageing reserve

If lead-acid batteries are operated as intended, a capacity loss of up to 2.5% per year (25% in 10 years) is to be expected as a rule. According to EN 50171, this capacity loss must be taken into account when determining the battery in order to achieve the full nominal operating life at the end of the life expectancy of 10 years.

The end of a battery's lifetime is reached when, at the end of the nominal operating time, the nominal voltage of the battery drops below 90% at nominal load.

#### Battery discharge current 21.5A + 25% ageing reserve = 26.9A

For the safety lighting of a conference centre with a required nominal operating time of 3 hours, a type 20-90 battery is required according to table 1.

#### 3. Calculation of charge current / quantity of chargers

According to EN 50171, discharged batteries must be recharged to 80% of their discharged capacity within 12 hours. The ageing reserve must not be taken into account when calculating the necessary charging current.

With a battery discharge current of 21.5A over a nominal operating time of 3 hours, the following results apply for the selected battery type 20-90 according to table 2: 1 charger 7A

#### 4. Ventilation of battery room

According to EN 50272-2, for battery rooms there is a necessary air flow needed using the following formula

 $Q = v \cdot q \cdot s \cdot n \cdot lgas \cdot CN \cdot 10^{-3} [m^3/h]$ and necessary inlet and outlet vents according to A = 28 \* Q.

According to table 2, for the selected battery there is a necessary air flow rate of  $Q = 0.49 \text{ m}^3/\text{h}$  and inlet and outlet vents in the battery room of 13.8 cm<sup>2</sup>.

#### 5. Protection rating of the mains input

The entire connected load of the CPS 220/64 system is to be used to determine the fuse protection in the main distribution board of the general power supply.

It results from the mains connection power of all connected luminaires and the number and type of the chargers.

Total power rating of luminaires	= 6.13 kVA
Power rating of charger 216V / 7A	= 1.82 kVA

Total power rating system: S = 7.95 kVA



### Table 1

Battery type	Dis	charge	current	t [A]	Blocks	Weight [kg]		Cabinets	Racks
C <sub>10</sub> -1.8V/Z	1h	2h	3h	8h		Block	Total		
20-12	7.2	4.1	3.0	1.4	18	4.1	73.80	600 x 600 x 300 mm	
20-18	10.7	6.2	4.4	1.8	18	6.3	113.40	1000 x 600 x 300 mm	
20-28	16.2	9.5	6.8	2.9	18	9.5	171.00	1000 x 600 x 300 mm	
20-33	19.9	11.1	7.5	3.4	18	10.9	196.20	1200 x 800 x 400 mm	
20-40	24.1	13.7	9.8	4.3	18	13.6	244.80	1200 x 800 x 400 mm	
20-55	33.2	18.5	12.9	5.5	18	22.5	405.00	1200 x 800 x 400 mm	
20-70	45.3	25.8	18.4	8.0	18	27.7	498.60	1200 x 800 x 400 mm	
20-70-1	53.2	28.3	19.1	8.0	18	25.4	457.20	1200 x 800 x 400 mm	
20-80	48.3	27.5	19.6	9.4	18	24.0	432.00	2 x 1200 x 800 x 400 mm	Type 1
20-90	66.9	37.8	27.4	11.4	18	32.8	590.40	2 x 1200 x 800 x 400 mm	Type 1
20-100	60.4	34.4	23.9	10.3	18	30.5	549.00	2 x 1200 x 800 x 400 mm	Type 1
20-135	91.0	50.2	34.0	13.8	18	40.6	730.80	2 x 1200 x 800 x 400 mm	Type 1
20-120	72.5	41.3	29.4	14.1	18	35.0	630.00	3 x 1200 x 800 x 400 mm	Type 1
20-150	90.6	51.7	36.2	15.4	18	44.5	801.00	3 x 1200 x 800 x 400 mm	Type 2
20-160	105.0	60.8	41.3	17.8	18	55.0	990.00	6 x 1200 x 800 x 400 mm	Type 3
20-200	120.0	68.9	49.1	20.7	18	65.0	1170.00	6 x 1200 x 800 x 400 mm	Type 3
20-230	144.0	80.0	55.2	24.1	18	73.5	1323.00	6 x 1200 x 800 x 400 mm	Type 4

Battery type, cabinets, weights, dimensions and discharge currents

Note: The ageing factor of 25% for the batteries is not considered for the discharge current values.

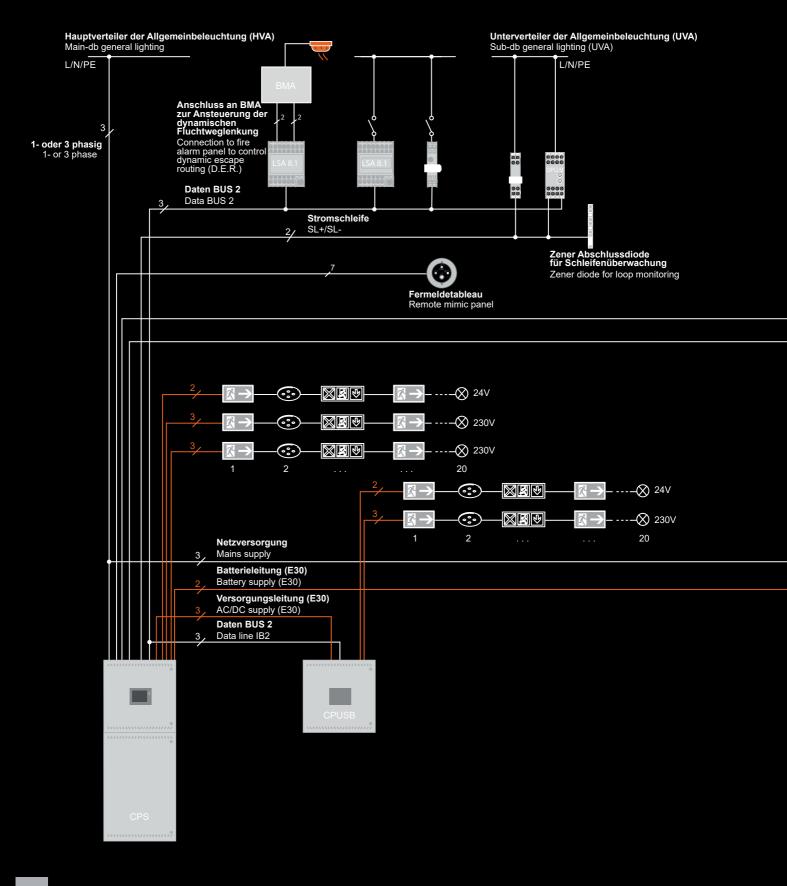
#### Table 2

Battery type, charging current , ventilation requirements. charging time 12 hours / 80%.

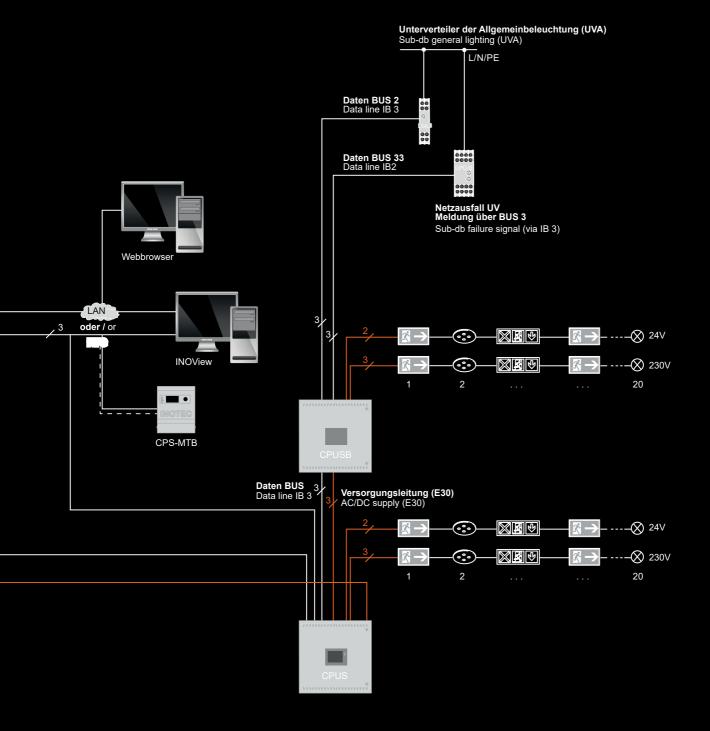
Battery type	No. of required chargers						Minimum airflow	Ventilation	Free air volume
	1h-disc	charge	3h-dis	charge	8h-dis	charge			
C <sub>10</sub> -1,8V/Z	3A	7A	3A	7A	3A	7A	[m³/h]	[cm <sup>2</sup> ]	[m³]
20-12	1		1		1		0.06	1.7	0.2
20-18	1		1		1		0.10	2.8	0.3
20-28	1		1		1		0.15	4.2	0.4
20-33	1		1		1		0.18	5.1	0.5
20-40	1		1		1		0.22	6.2	0.6
20-55	1		1		1		0.30	8.4	0.8
20-70	1			1		1	0.38	10.7	1.0
20-70-1		1		1		1	0.38	10.7	1.0
20-80		1		1		1	0.43	12.1	1.1
20-90		1		1		1	0.49	13.8	1.3
20-100		1		1		1	0.54	15.2	1.4
20-135		1		1	1	1	0.73	20.5	1.9
20-120		1		1	1	1	0.65	18.2	1.7
20-150		1		1	1	1	0.81	22.7	2.1
20-160		1	1	1	1	1	0.86	24.1	2.2
20-200	1	1	1	1		2	1.08	30.3	2.7
20-230	1	1		2		2	1.24	34.8	3.1



## Planning guide







Systems overview Technical data and systems overview



Technical data:	CPS 220/64/11kW-1 1-ph	CPS 220/64/11kW-2 1-ph	CPS 220/64/11kW-1 3-ph	CPS 220/64/11kW 3-ph	
Protection class: 1 Protection category: IP 20 Permitted ambient temperature: System: -5°C to +35°C, max. 85% relative humidity, non-condensing Battery: acc. battery data sheet Battery: 216 VDC Colour: RAL 7035 Base frame (optional): 100mm / 200mm	uu 0021	uu 0001	uu 001	Tiefe Bopth 400 mm	
Rated voltage	1~N/PE, 230V AC ±10% 50Hz / 60Hz ±2%	1~N/PE, 230V AC ±10% 50Hz / 60Hz ±2%	3~N/PE, 400V AC ±10% 50Hz / 60Hz ±2%	3~N/PE, 400V AC ±10% 50Hz / 60Hz ±2%	
System current: Internal	50A	50A	50A	50A	
Total	50A	50A	50A	50A	
max. Load	11kW	11kW	11kW	11kW	
Circuit modules, max. intern/extern 4x2A, 2x4A, 1x6A, 2x2,5A D.E.R.	16/16	16 / 16	16 / 16	16 / 16	
2x2,5A 24V max. intern/extern	8 / 16	8 / 16	8 / 16	8 / 16	
max. installed battery capacity	75Ah	75Ah	75Ah	-	
Charger	1 x 3A or 7A	2 x 3A or 7A	1 x 3A or 7A	max. 4 x 3A or 7A	
Space for options	2 x 12 DU	3 x 12 DU	3 x 12 DU	30 DU	
- with function preservation	2 x 12 DU	-	-	-	
Conductor cross section, max. (mm <sup>2</sup> )					
Mains supply	35	35	35	35	
Battery supply	35	35	35	35	
Outgoing to luminaries	4	4	4	4	
Outgoing data line (RTG)	4	4	4	4	
Outgoing BUS IB2/IB3	4	4	4	4	
Outgoing 24V monitoring	4	4	4	4	
Outgoing mains to CPUS	35	35	35	35	
Outgoing battery to CPUS	35	35	35	35	
Outgoing supply to CPUSB	35	35	35	35	
Dimensions: H x W x D (mm)	2030 x 800 x 400	2230 x 800 x 400	2230 x 800 x 400	2030 x 800 x 400	
With function preservation (option)	BRS 10.1	-	-	-	
- with fire preservation	2346 x 894 x 586	-	-	-	
Cable inlets	slide cover free inlet or				
	22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design	22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design	22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design	22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design	

\*1 max. 55Ah Battery



CPS 220/64/22kW 3-ph	CPS 220/20/1,2A	CPS 220/20/3A	CPS 220/20/5,5kW/3A	CPS 220/20/5,5kW-1 1-ph
June 10000	E 00 Tiefe J30 mm Jiefe Depth Jiefe Depth Jiefe Depth Jiefe Depth 00 00 00 00 00 00 00 00 00 0	uu 000 Tiefe Depth 330 mm • • • • • • • • • • • • • • • • • •	WU 000 WU 000 UU 000	WU 023
3~N/PE, 400V AC ±10% 50Hz / 60Hz ±2%	1~N/PE, 230V AC ±10% 50Hz / 60Hz ±2%	1~N/PE, 230V AC ±10% 50Hz / 60Hz ±2%	1~N/PE, 230V AC ±10% 50Hz / 60Hz ±2%	1~N/PE, 230V AC ±10% 50Hz / 60Hz ±2%
63A	7A	7A	25A	25A
100A	7A	7A	25A	25A
22kW	1,5kW	1,5kW	5,5kW	5,5kW
16 / 16	5 / -	5/-	5 / 16	5 / 16
8/16	2/-	2/-	2/16	2/16
-	18Ah	28Ah	28Ah	75Ah
max. 4 x 3A or 7A	1,2A	3A	3A	1 x 3A or 7A
24 DU	5 DU	5 DU	7 DU	2 x 12 DU
-	6 DU	10 DU	10 DU	2 x 12 DU
35	10	10	10	35
35	35	35	35	35
4	4	4	4	4
4	4	4	4	4
4	4	4	4	4
4	4	4	4	4
35	-	-	35	35
35	-	-	35	35
35	-	-	35	35
2030 x 800 x 400	1600 x 600 x 330	1800 x 600 x 330	1800 x 600 x 330	2030 x 800 x 400
-	BRS 31 / BRS 10.1	BRS 32 / BRS 10.1	BRS 32 / BRS 10.1	BRS 10.1* <sup>1</sup>
-	2346 x 894 x 586 (BRS 10.1) 1368 x 668 x 496 (BRS 31)	2346 x 894 x 586 (BRS 10.1) 2066 x 766 x 618 (BRS 32)	2346 x 894 x 586 (BRS 10.1) 2066 x 766 x 618 (BRS 32)	2346 x 894 x 586
slide cover free inlet <sup>or</sup>	10 x M20	10 x M20	10 x M20	slide cover free inlet or
22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design	7 x M20 / 30 x M25 4 x M32	7 x M20 / 30 x M25 4 x M32	7 x M20 / 30 x M25 4 x M32	22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design

\*1 max. 55Ah Battery



	CPUS 220/64/11kW	CPUSB 220/64/16	CPUSB 220/64/8-1	CPUSB 220/ 64/1 - 2A	CPUSB 220/64/ 1-2.5A/24V
	High Bank State St	High Bepth 400 mm 800 mm	CPUSB 220/64/8-9	CPUSB 220 / 64 / 1 - 4A	
Supply voltage	1~N/PE, 230V AC ±10% 50Hz / 60Hz ±2%	23	0V AC ±10% / 216V DC (Supplied via main		
System current: Internal	50A	50A	50A	8A	5A (24V)
Total	50A	50A	50A	8A	5A (24V)
max. power:	11kW				
Circuit seperating module (SKW)		-	-	ves	yes
Slot cards 4x2A, 2x4A, 1x6A, 2x2.5A D.E.R. max. internal/external	16/16	max. 16	max. 8	1 (je 2A o. 4A) (each 2A or 4A)	-
2x2.5A 24V max. internal/external	8 / 16	max. 8	max. 4	-	1
Space for options	2 x 12 DU	2 x 12 DU	12 DU	-	-
- at functional preservation	16 DU	20 DU	20 DU	-	-
Max. cross section (mm <sup>2</sup> ) of:					
Supply line / mains	35	35	35	4	4
Battery	35	4	4	4	4
Final circuits	4	4	4	4	4
Data Bus (RTG)	4	-	-	2,5	2,5
Data Bus IB2	4	4	4	4	4
24V current loop	4	-	-	2,5	2,5
Supply line for CPUSB	35				
Dimensions: H x W x D (mm) Functional preservation (optional)	830 x 800 x 400 BRS 40	830 x 800 x 400 BRS 40	600 x 600 x 330 BRS 40	378 x 181 x 82 BRS 41	378 x 181 x 82 BRS 41
- at functional preservation	1198 x 648 x 449 (BRS 40)	1198 x 648 x 449 (BRS 40)	1198 x 648 x 449		898 x 648 x 449
Cable inlet		slide cover free inlet	7 x M20 / 30 x M25 4 x M32	11 x M20	11 x M20
	22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design	22 x M20 / 64 x M25 6 x M32 / 2 x M50 depending on the design			

1 DU	2 DU	3 DU	4 DU	5 DU	7 DU
DPÜ	DPÜ / B.2	LSA 3.1 24V, incl. 2 terminals - extension *3, *5	LSA 8.1	LSA 8.1 24V, incl. 4 terminals - extension *3, *5	LSA 8.1 24V, incl. 4 terminals + 24V PSU - basic set *2, *4
LSA 3.1	Fused Neozed for 3-phase connection		RIF 5		
Terminals IB3			BCS		
			Fused output Neozed for BUS-substation		
			Fused output battery Neozed for substation		
			LSA 3.1 24V, incl. 2 terminals + 24V PSU - basic set *2, *4		

\*2 First LSA xxx 24V prewired, incl. 24V PSU, for additional use the extension

\*3 additional LSA xxx 24V prewired, without 24V PSU, in combination with the basic set

\*4 not for use with CPS 220/20 built in compact cabinets (600mm wide)

\*5 for use with CPS 220/20 built in compact cabinet (600mm wide)



Microprocessor controlled freely programmable, with non volatile memory TFT touch controller with build in SD-card.

- 5"WVGA touchscreen with intuitive graphical user interfaceProgramming, monitoring and control of upto 96 circuits
- (1920 luminaires)
- Switching modes freely programmable
- Single luminaire monitoring (SV)/circuit monitoring (SKU)
- Programmable automatic function test/battery duration test
- USB interface for uploading/downloading complete system configuration programming, connection of keyboard/PCLcompatible Printer
- Password protection
- Blocking function for complete system/ circuits
- Integrated INOWeb/INOView network interface
- Interface for BMS or other external monitoring systems
- Display of complete status information of the system including battery voltage/ battery current and battery capacity
- Display of failure information for every circuit or individual luminaire incl. destination text info
- Display of charger failure
- Display of voltage and temperature of each individual battery block when using (optional) INOTEC Battery Control System BCS.
- Setting of deep discharge protection and display
- Setting delay on mains return 1-15min
- Log book entries for more than 2 years
- Earth leakage monitor with test and display facility
- Electronically monitored 24V loop for monitoring of any number of sub distribution boards
- Manual reset

#### **CPS - TFT-WVGA-Touch Controller**





230V circuit slot card with 4 final circuits for central battery system CPS 220/64 to supply, control and monitor static 230V exit- and safety luminaires.

- Individual slide-in circuit modules with 2 pole fuse-protection for every circuit
- Single luminaire- and circuit- monitoring with JOKER function
- max. 20 luminaire per final circuit
- Monitoring without data-line

#### Technical data

U <sub>N</sub> AC:	230V AC 50/60 Hz
U <sub>N</sub> DC:	176-264V DC
Max. current per circuit:	2A
Max. inrush current:	250A / 500µs
Max. power losses:	15W

CP 4x2A

Art. no. 979 002

Final circuit slot card



230V circuit slot card with 2 final circuits for central battery system CPS 220/64 to supply, control and monitor static 230V exit- and safety luminaires.

- Individual slide-in circuit modules with 2 pole fuse-protection for every circuit
- Single luminaire- and circuit- monitoring with JOKER function
- max. 20 luminaire per final circuit
- Monitoring without data-line

#### **Technical data**

U <sub>N</sub> AC:	230V AC 50/60 Hz
U <sub>N</sub> DC:	176-264V DC
Max. current per circuit:	4A
Max. inrush current:	250A / 500µs
Max. power losses:	15W

### CP 2x4A

Art. no. 979 004

#### Final circuit slot card





230V circuit slot card with one final circuits for central battery system CPS 220/64 to supply, control and monitor static 230V exit- and safety luminaires.

- Individual slide-in circuit modules with 2 pole fuse-protection for every circuit
- Single luminaire- and circuit- monitoring with JOKER function
- max. 20 luminaire per final circuit
- Monitoring without data-line

#### **Technical data**

U <sub>N</sub> AC:	230V AC 50/60 Hz
U <sub>N</sub> DC:	176-264V DC
Max. current per circuit:	6A
Max. inrush current:	250A / 500µs
Max. power losses:	15W

**CP 1x6A** Art. no. 979 005 Final circuit slot card



CP 2x2,5A / D.E.R. 230V

Art. no. 979 010

#### Final circuit slot card

230V circuit slot card with 2 final circuits for central battery system CPS 220/64 to supply, control and monitor static 230V exit- and safety luminaires, sas well as segment encoder in connection with PSU48 for operating luminaires of the FS-series with running light function.

- Individual slide-in circuit modules with 2 pole fuse-protection for every circuit
- Single luminaire regulation and monitoring
- max. 20 luminaire per final circuit
- I common BUS-line for control and monitoring
- Luminaires individually program- and addressable
- Assignment of 8 switching inputs per dynamic escape route luminaire

U <sub>N</sub> AC:	230V AC 50/60 Hz
U <sub>N</sub> DC:	176-264V DC
Max. current per circuit:	2,5A
Max. power losses:	4W



24V Final circuit slot card with 2 final circuit for connection to centralbattery system CPS 220/64 to supply, control and monitor 24V INOTEC LED-system luminaires. Mixed operation of static and dynamic exit- and safety luminaires at one final circuit.

- 2-pol fuse per circuit
- Single luminaire and circuit monitoring with Joker function
- max. 20 luminaire per final circuit
- monitoring without additional data line
- individual programming, addressing and dimming of each luminaire
- 2 final circuits protection class III (SELV) à 2.5A
- Allocation of 2 switching inputs per exit- or safety luminaire; 8 switching inputs for dynamic escape route luminaires

#### **Technical data**

U <sub>N</sub> AC:	230V AC 50/60 Hz
U <sub>N</sub> DC:	174-264V DC
U <sub>OUT</sub> :	24V DC +-20%
Max. current per circuit:	2,5A
Max. power losses:	20,5W

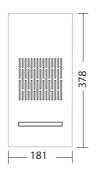
CP 2x2,5A/24V

Art. no. 979 009



#### CPUSB 220/64/1-2x2,5A/24V

Art. no. 922 261





tor static 24V INOTEC LED-system luminaires. Mixed operation of static and dynamic exit- and safety luminaires at one final circuit. • 2-pol fuse per circuit

central battery system CPS 220/64 to supply, control and moni-

BUS-substation CPUSB with 2 final circuits for connection to

- Single luminaire and circuit monitoring with Joker function
- max. 20 luminaire per final circuit
- monitoring without additional data line
- individual programming, addressing and dimming of each luminaire
- 2 final circuits protection class III (SELV) à 2.5A
- Allocation of 2 switching inputs per exit- or safety luminaire; 8 switching inputs for dynamic escape route luminaires
- integrated circuits switch module
- Input for current loop

U <sub>N</sub> AC:	230V AC 50/60 Hz
U <sub>N</sub> DC:	174-264V DC
U <sub>OUT</sub> :	24V DC +-20%
Max. current per circuit:	2,5A
Max. power losses:	20,5W

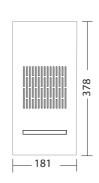


BUS-substation CPUSB with 4 final circuits for connection to central battery system CPS 220/64 to supply, control and monitor static 230V exit- and safety luminaires.

- 2-pol fuse per circuit
- Single luminaire and circuit monitoring with Joker function
- max. 20 luminaire per final circuit
- monitoring without data line
- integrated circuits switch module
- Input for current loop

#### CPUSB 220/64/1-2A

Art.-no. 922 200





#### **Technical data**

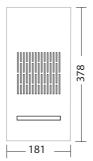
30V AC 50/60 Hz
76-264V DC
A
50A / 500µs
5W

BUS-substation CPUSB with 2 final circuit for connection to central battery system CPS 220/64 to supply, control and monitor static 230V exit- and safety luminaires.

- 2-pol fuse per circuit
- Single luminaire and circuit monitoring with Joker function
- max. 20 luminaire per final circuit
- monitoring without data line
- integrated circuits switch module
- Input for current loop

#### CPUSB 220/64/1-4A

Art.-no. 922 201





U <sub>N</sub> AC:	230V AC 50/60 Hz
U <sub>N</sub> DC:	176-264V DC
U <sub>OUT</sub> :	4A
Max. current per circuit:	250A / 500µs
Max. power losses:	15W



Microprozessor-controlled, modular charger for 230V central battery system with max. 3A charging current in 9', housing. Charging characteristic according to DIN EN 50272-1.

#### **Technical data**

UN AC:	220-240V AC 50/60 Hz	
U <sub>OUT</sub> DC:	176 – 264 V DC	
Output current:	3A	
Efficiency:	90%	
cos phi:	0,77	
Perm. temperature range: -15°C +45°C		
Housing:	Aluminium	
Design acc. to:	DIN EN 60146-1-1:2004-04	
EMC compatibility:	EN 50081 and EN 50082	

#### Charger 220V / 3A

Art. no. 908 003





Microprozessor-controlled, modular charger for 230V central battery system with max. 7A charging current in 9', housing. Charging characteristic according to DIN EN 50272-1.

#### Technical data

U <sub>N</sub> AC:	220-240V AC 50/60 Hz	
U <sub>OUT</sub> DC:	176 – 264 V DC	
Output current:	7A	
Efficiency:	92%	
cos phi:	0,995	
Perm. temperature range: -15°C +45°C		
Housing:	Aluminium	
Design acc. to:	DIN EN 60146-1-1:2011-04	
EMC compatibility:	EN 50081 and EN 50082	

**Charger 220V / 7A** Art. no. 908 005





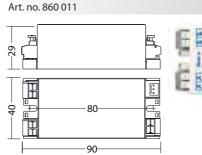


Luminaire module

LED-driver for the connection to 230V Low Power or Central Battery Supply systems to supply 1-3 LEDs. Dimmable in mains supply. Designed to be fitted inside luminaires.

#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	176 – 264 V DC
Input current:	55mA
Output current:	const. 320mA +-5%
cos Phi:	0,60,77
Inrush current:	8A/50µs
Perm. temperature range:	-15°C +45°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

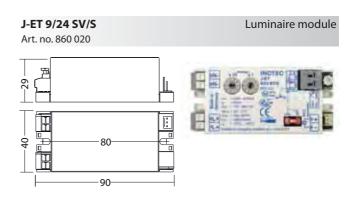


J-ET 9/24 SV



LED-driver for the connection to 230V Low Power or Central Battery Supply systems to supply 1-6 LEDs. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Dimmable in mains supply. Designed to be fitted inside luminaires.

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	176 – 264 V DC
Input current:	55mA
Output current:	const. 320mA +-5%
cos Phi:	0,60,77
Inrush current:	8A/50µs
Perm. temperature range:	-15°C +45°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule





LED-driver for the connection to 230V Low Power or Central Battery Supply systems to supply 1-3 LEDs. Dimmable in mains supply. Designed to be fitted inside luminaires.

#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	176 – 264 V DC
Input current:	47mA
Output current:	const. 650mA +-5%
cos Phi:	0,81
Inrush current:	8A/50µs
Perm. temperature range:	-15°C +50°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

#### J-ET 7 SV

Art. no. 860 019

6

#### Monitoring module



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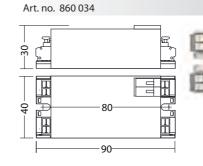
90-

LED-driver for the connection to 230V Low Power or Central Battery Supply systems to supply 1-3 LEDs. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Dimmable in mains supply. Designed to be fitted inside luminaires.

#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	176 – 264 V DC
Input current:	47mA
Output current:	const. 650mA +-5%
cos Phi:	0,81
Inrush current:	8A/50µs
Perm. temperature range:	-15°C +45°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

#### J-ET 7 SV/S



#### Monitoring module

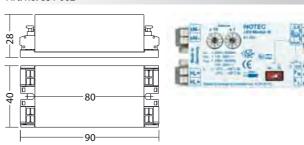


Single lamp monitoring modules for the connection to 230V Low- or Central Power Supply systems. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Designed to be fitted inside luminaires.

Technical data	
U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	179 – 264 V DC
Inrush current:	2A/40µs
Inrush current of the Monitored luminaire:	80A/500µs
l Operation:	> 20mA
l Failure:	< 10mA
Perm. temperature range:	: −15°C +65°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

#### J-SV-Modul /S, 5-120W

Art. no. 851 002



#### Settings for safe failure identification:

Load	<b>I</b> Operation	I <sub>Failure</sub>
J-SV-Modul/S	>20 mA	< 10 mA
J-SV-Modul.2/S	>70 mA	< 45 mA
J-SV-Modul.3/S	>12 mA	< 8 mA
J-SV-Modul.4/S	>70 mA	< 45 mA
J-SV-Modul.5/S	>60 mA	< 35 mA
J-SV-Modul L/S	>20 mA	< 10 mA
J-SV-Modul T/S	>60 mA	< 50 mA

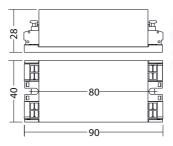
Singel lamp monitoring modules Single lamp monitoring modulesfor the connection to 230V Low- or Central Power Supply systems. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Designed to be fitted inside luminaires.

#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	179 – 264 V DC
Inrush current:	2A/40µs
Inrush current of the moni tored luminaire:	-80A/500µs
l Operation:	> 70mA
l Failure:	< 45mA
Perm. temperature range:	-15°C +65°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

#### J-SV-Modul.2 /S, 20-300W

Art. no. 851 004





Luminaire module



Load	<b>I</b> Operation	<b>I</b> Failure
J-SV-Modul/S	>20 mA	< 10 mA
J-SV-Modul.2/S	>70 mA	< 45 mA
J-SV-Modul.3/S	>12 mA	< 8 mA
J-SV-Modul.4/S	>70 mA	< 45 mA
J-SV-Modul.5/S	>60 mA	< 35 mA
J-SV-Modul L/S	>20 mA	< 10 mA
J-SV-Modul T/S	>60 mA	< 50 mA



Single lamp monitoring modules for the connection to 230V Low- or Central Power Supply systems. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Designed to be fitted inside luminaires.

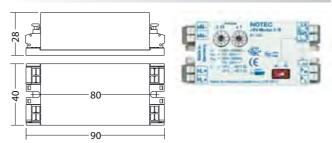
#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	179 – 264 V DC
Inrush current:	2A/40µs
Inrush current of the monito- red luminaire:	80A/500µs
l Operation:	> 12mA
l Failure:	< 8mA
Perm. temperature range:	-15°C +65°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

#### J-SV-Modul.3 /S, 2-30W

Art. no. 851 025

#### Monitoring module



#### Settings for safe failure identification:

Load	<b>I</b> Operation	<b>I</b> Failure
J-SV-Modul/S	>20 mA	< 10 mA
J-SV-Modul.2/S	>70 mA	< 45 mA
J-SV-Modul.3/S	>12 mA	< 8 mA
J-SV-Modul.4/S	>70 mA	< 45 mA
J-SV-Modul.5/S	>60 mA	< 35 mA
J-SV-Modul L/S	>20 mA	< 10 mA
J-SV-Modul T/S	>60 mA	< 50 mA

Single lamp monitoring modules for the connection to 230V Low- or Central Power Supply systems. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Designed to be fitted inside luminaires.

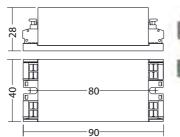
#### Technical data

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	179 – 264 V DC
Inrush current:	2A/40µs
Inrush current of the monito- red luminaire:	80A/500µs
l Operation:	> 70mA
l Failure:	< 45mA
Perm. temperature range:	-15°C +65°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

#### J-SV-Modul.4 /S, 18-120W

Art. no. 851 029

Monitoring module





Load	<b>I</b> Operation	<b>I</b> Failure
J-SV-Modul/S	>20 mA	< 10 mA
J-SV-Modul.2/S	>70 mA	< 45 mA
J-SV-Modul.3/S	>12 mA	< 8 mA
J-SV-Modul.4/S	>70 mA	< 45 mA
J-SV-Modul.5/S	>60 mA	< 35 mA
J-SV-Modul L/S	>20 mA	< 10 mA
J-SV-Modul T/S	>60 mA	< 50 mA



Single lamp monitoring modules for the connection to 230V Low- or Central Power Supply systems. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Designed to be fitted inside luminaires.

#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz	
U <sub>N</sub> DC:	179 – 264 V DC	
Inrush current:	2A/40µs	
Inrush current of the	80A/500µs	
Monitored luminaire:		
l Operation:	> 60mA	
l Failure:	< 35mA	
Perm. temperature	-15°C +65°C	
range:		
Housing:	Polycarbonat	
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule	

#### J-SV-Modul.5 /S, 15-120W

Art. no. 851 052





#### Settings for safe failure identification:

Load	<b>I</b> Operation	I <sub>Failure</sub>
J-SV-Modul/S	>20 mA	< 10 mA
J-SV-Modul.2/S	>70 mA	< 45 mA
J-SV-Modul.3/S	>12 mA	< 8 mA
J-SV-Modul.4/S	>70 mA	< 45 mA
J-SV-Modul.5/S	>60 mA	< 35 mA
J-SV-Modul L/S	>20 mA	< 10 mA
J-SV-Modul T/S	>60 mA	< 50 mA

Single lamp monitoring modules for the connection to 230V Low- or Central Power Supply systems. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Designed to be fitted inside luminaires.

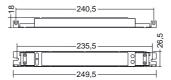
#### J-SV-Modul.L /S, 5-120W Art. no. 851 026

Luminaire module



#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz	
U <sub>N</sub> DC:	179 – 264 V DC	
Inrush current:	2A/40µs	
Inrush current of the Monitored luminaire:	80A/500µs	
l Operation:	> 20mA	
l Failure:	< 10mA	
Perm. temperature	-15°C +65°C	
range:		
Housing:	Polycarbonat	
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule	



5		
Load	<b>I</b> Operation	I <sub>Failure</sub>
J-SV-Modul/S	>20 mA	< 10 mA
J-SV-Modul.2/S	>70 mA	< 45 mA
J-SV-Modul.3/S	>12 mA	< 8 mA
J-SV-Modul.4/S	>70 mA	< 45 mA
J-SV-Modul.5/S	>60 mA	< 35 mA
J-SV-Modul L/S	>20 mA	< 10 mA
J-SV-Modul T/S	>60 mA	< 50 mA



Single lamp monitoring modules for the connection to 230V Low- or Central Power Supply systems. Including 230V galvanic isolated sense input for switching with general lighting or as phase monitor. Adjustable emergency operation time with automatic switch-off. Designed to be fitted inside luminaires.

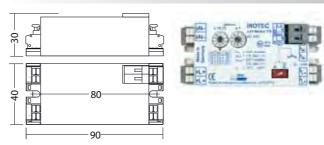
#### **Technical data**

U <sub>N</sub> AC:	220-240V AC 50/60 Hz
U <sub>N</sub> DC:	179 – 264 V DC
Inrush current:	13A/68µs
Inrush current of the monito- red luminaire:	40A/500µs
l Operation:	> 60mA
l Failure:	< 50mA
Perm. temperature range:	-15°C +50°C
Housing:	Polycarbonat
Terminals:	max. 2,5mm <sup>2</sup> single-core or 1,5mm <sup>2</sup> multi-core with ferrule

#### J-SV-Modul.T /S, 20-100W

Art. no. 851 046

#### Monitoring module



Load	<b>I</b> Operation	<b>I</b> Failure
J-SV-Modul/S	>20 mA	< 10 mA
J-SV-Modul.2/S	>70 mA	< 45 mA
J-SV-Modul.3/S	>12 mA	< 8 mA
J-SV-Modul.4/S	>70 mA	< 45 mA
J-SV-Modul.5/S	>60 mA	< 35 mA
J-SV-Modul L/S	>20 mA	< 10 mA
J-SV-Modul T/S	>60 mA	< 50 mA



For common switching (On/Off) of general and safety luminaires.

The assignment of the luminaires to the light switch application module is done during programming of the controller.

A maximum of 8 LSA3.1 modules can be connected to one controller.

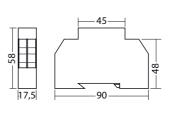
#### **Technical data**

Housing:	Thermoplastic V0	
Nominal voltage:	230 V AC	
Protection category:	II	
Protection class:	IP 20	
Perm. temperature range:-15°C +40°C		
EMC compatibility:	acc. to EN 61000-6-2 / 61000-6-3	
Terminals:	2.5mm <sup>2</sup> single-core 1.5mm <sup>2</sup> multi-core with ferrule	



Art. No. 850 010

DIN rail mounting





For common switching (On/Off) of general and safety luminaires.

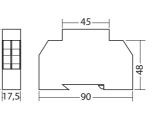
The assignment of the luminaires to the light switch application module is done during programming of the controller.

A maximum of 8 LSA3.1 modules can be connected to one controller.

#### **Technical data**

Housing:	Thermoplastic V0	
Nominal voltage:	24V DC	
Protection category:	III	
Protection class:	IP 20	
Perm. temperature range:-15°C +40°C		
EMC compatibility:	acc. to EN 55015	
Terminals:	2.5mm <sup>2</sup> single-core	
	1.5mm <sup>2</sup> multi-core with ferrule	

#### **LSA 3.1 / 24V** Art. No. 850017





DIN rail mounting



For common switching (On/Off) of mains and safety luminaires and for monitoring of mains voltage.

Channels are galvanically isolated.

The assignment of the luminaires to the light switch application module is done during programming of the controller. Integrated 3-phase monitoring / BUS:

- Any phase sequence
- Signalling contact / 1 x change-over contact
- Detection of undervoltage and loss of mains
- 1-ph connection possible acc. to to IEC 255,VDE 0435, T.303
- Nominal Voltage 230V / 400V AC
- Threshold: 0,85 Un
- Deactivateable

A maximum of 3 LSA8.1 modules can be connected to one controller.

#### **Technical data**

Housing:	Thermoplastic V0
Nominal voltage:	230V AC
Protection category:	II
Protection class:	IP20
Perm. temperature ranges	s −15°C +40°C
EMC compatibility:	acc. to EN 61000-6-2 / 61000-6-3
Terminals:	2.5mm <sup>2</sup> single-core 1.5mm <sup>2</sup> multi-core with ferrule

For common switching (On/Off) of mains and safety luminaires and for monitoring of mains voltage.

Channels are galvanically isolated.

The assignment of the luminaires to the light switch application module is done during programming of the controller. Integrated 3-phase monitoring /BUS:

- Any phase sequence
- Signalling contact / 1 x change-over contact
- Detection of undervoltage and loss of mains
- 1-ph connection possible acc. to to IEC 255,VDE 0435, T.303
- Nominal Voltage 230V / 400V AC
- Threshold: 0,85 Un
- Deactivateable

A maximum of 3 LSA8.1 modules can be connected to one controller.

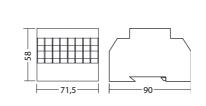
#### **Technical data**

Housing:	Thermoplastic V0
Nominal voltage:	24V DC
Protection category:	II
Protection class:	IP20
Perm. temperature range:	-15°C +40°C
EMC compatibility:	acc. to EN 61000-6-2 / 61000-6-3
Terminals:	2.5mm <sup>2</sup> single-core 1.5mm <sup>2</sup> multi-core with ferrule

#### LSA 8.1 / 230V

Art. No. 850 008

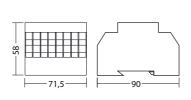
#### DIN rail mounting





#### LSA 8.1 / 24V

Art. No. 850 007





**DIN** rail mounting

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For voltage monitoring of sub distribution boards. Detailed phase failure information and location details in plain text at the controller unit.

Equipped with two voltage-free n/o signalling contacts.

- LED indicators for L1, L2, L3
- Any phase sequence
- Detection of undervoltage and mains failure in three-phase network
- Can also be connected as a 1-phase module according to IEC 255
- Suitable for switchboard mounting on DIN rails.
- Detailed phase failure information and location details in plain text at the emergency lighting central.
- Variable delay time after mains return.

A maximum of 31 DPÜ/B.2 modules can be connected to one controller unit!

#### **Technical data**

Housing:	Thermoplastic V0
Nominal voltage:	230V/400V AC 50/60 Hz
Threshold:	0,85 U <sub>N</sub>
Protection category:	II
Protection class:	IP20
Perm. temperature range	: −15°C +40°C
EMC compatibility:	acc. to EN 61000-6-2 / 61000-6-3
Terminals:	2.5mm <sup>2</sup> single-core
	1.5mm <sup>2</sup> multi-core with ferrule

For voltage monitoring of sub distribution boards.

Equipped with one voltage-free fault signal change-over contact • LED indicator for L1, L2, L3

- Any phase sequence
- Detection of undervoltage and mains failure at three-phase network
- Can also be connected as a 1-phase module acc. to to IEC 255, VDE0435, T.303
- Suitable for switchboard mounting on DIN rails

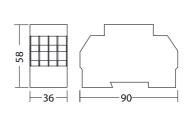
#### **Technical data**

Housing:	Thermoplastic V0
Nominal voltage:	230V/400V AC 50/60 Hz
Threshold:	0,85 U <sub>N</sub>
Protection category:	I
Protection class:	IP20
Perm. temperature range:	-20°C +40°C
EMC compatibility:	acc. to EN 61000-6-2 / 61000-6-3
Terminals:	2.5mm <sup>2</sup> single-core 1.5mm <sup>2</sup> multi-core with ferrule

#### DPÜ/B.2

Art. No. 890 417

DIN rail mounting





#### DPÜ

Art. No. 890 400

# 







DIN rail mounting

Interface for remote status indication and system blocking function.

- Free programmable, in connection to a switch, for
- maintained and non maintained emergency light ON/OFF
- maintained emergency light ON/OFF

With or without loop monitoring

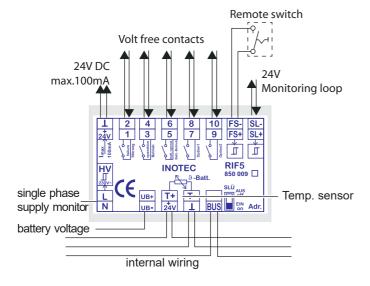
- 5 voltfree contacts for
- operation
- battery operation
- failure (general)
- free programmable 2x

(max. load per contact: 24V/1A)

Terminals battery sensor for temperature controlled charging With phase monitor (sub-db or main-db), single phase

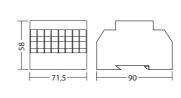
EMC compatibility acc. to EN 61000-6-2 / 61000-6-3 EMC protected to EN 55015

		System status		
		Operation	Sum- failure	Battery operation
s	Failure 1-2	close	open	close
act	Operation 3-4	close	open	open
contacts	Battery operation 5-6	open	open	close
ay	Option 1	selectable		
Relay	Option 2	selectable		



#### RIF 5

Art. no. 850 009







Batterymanagementsystem BCS for monitoring of up to 36 battery blocks. Logging of the individual battery block temperatures and voltages allows a temperature controlled charging and a safety shutdown when limits are exceeded. All RIF5 functionalities are intergrated. Usable only in combination with a TFT controller unit.

#### **Technical data:**

Nominal voltage:	24V D0
Perm. temperature range:	-15°C .
Housing:	Therm
Terminals:	2,5mm
	multi-

EMC compatibility: Protection class: Protection category: Max. Sensors:

Technical data: Nominal voltage:

**Housing:** 

**Power consumption:** 

**EMC compatibility:** 

**Protection category:** 

**Protection class:** 

24V DC -15°C ... +40°C Thermoplastic V0 2,5mm<sup>2</sup> single-core or 1,5mm<sup>2</sup> multi-core with ferrule acc. to DIN EN 55015 I IP20 36

#### BCS

00

Art. no. 990 101

71.5

#### Battery monitoring module

BCS sensor for monitoring of battery block voltage and temperature.

Perm. temperature range: -10°C ... +95°C

7-20V DC

IP20

1,1mA Standby-Modus 1,5mA query mode

Thermoplastic V0

acc. to DIN EN 55015

#### BCS Sensor

Art. no. 990 100





Wall mounting

#### **CPS FUSION-MTB**

External status and fault indication down to luminaire level of up to 16 connected CPS FUSION systems via three-core RTG bus.

Central initiation of manual and automatic function and duration tests at freely definable time intervals.

The status of the emergency lighting systems is indicated by 3 Status-LEDs and on the OLED graphic display in clear text or acoustically indicated by an integrated buzzer.

#### Function indicators:

- Green LED operation
- Yellow LED Battery operation
- Red LED Fault (general)

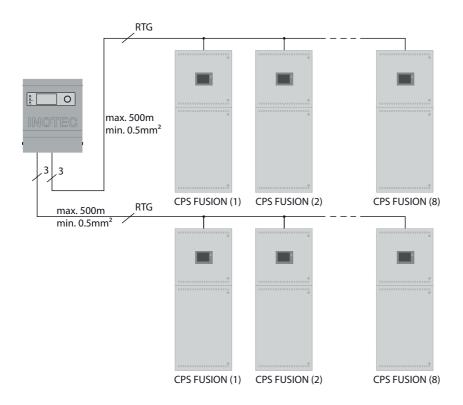
Additional status indication by 4 potential-free contacts:

- Operation
- Battery operation
- Fault
- Free programmable

Terminals for circuit loop in order to block/release the connected emergency lighting systems.

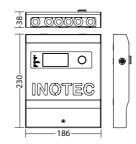
#### **Technical data**

Nominal voltage:	230V AC +/- 10% 24V DC +/- 20% (optional)
Perm. temperature range:	-5°C bis +30°C
Protection category:	I
Protection class:	IP 20



#### **CPS FUSION-MTB**

Art. No. 972 400V







Wall mounting

#### МТВ

The MTB-Mimic panels (MTB/AP = wall mounting, MTB/ UP = switchboard/recessed wall mounting) are used to display status and fault messages of emergency lighting systems.

With the integrated key-switch, the system can be blocked.

#### **Functions:**

Key-switch programmable for

- Emergency and maintained light ON/OFF
- Maintained light ON/OFF

#### **Function indicators:**

Green LED – operation

Yellow LED – Battery operation

Red LED – Fault (general)

Connection to relay contacts of a CPS FUSION; maximum wire length with a cross-section of 0.5mm<sup>2</sup>: 500m

Technical data Nominal voltage: Operating mode: Perm. temperature range: Protection class: Housing: EMC compatibility:

U<sub>N</sub>= 24V DC +/-10% Continous operation -15°C bis +40°C IP30 Stainless steel cover/Polycarbonate acc. to DIN EN 55015

### 

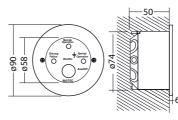
43

MTB/AP

Art. No. 990 097



**MTB/UP** Art. No. 990 039 Recessed wall mounting





**Logbook** Art. No. 708 059

#### Documentation

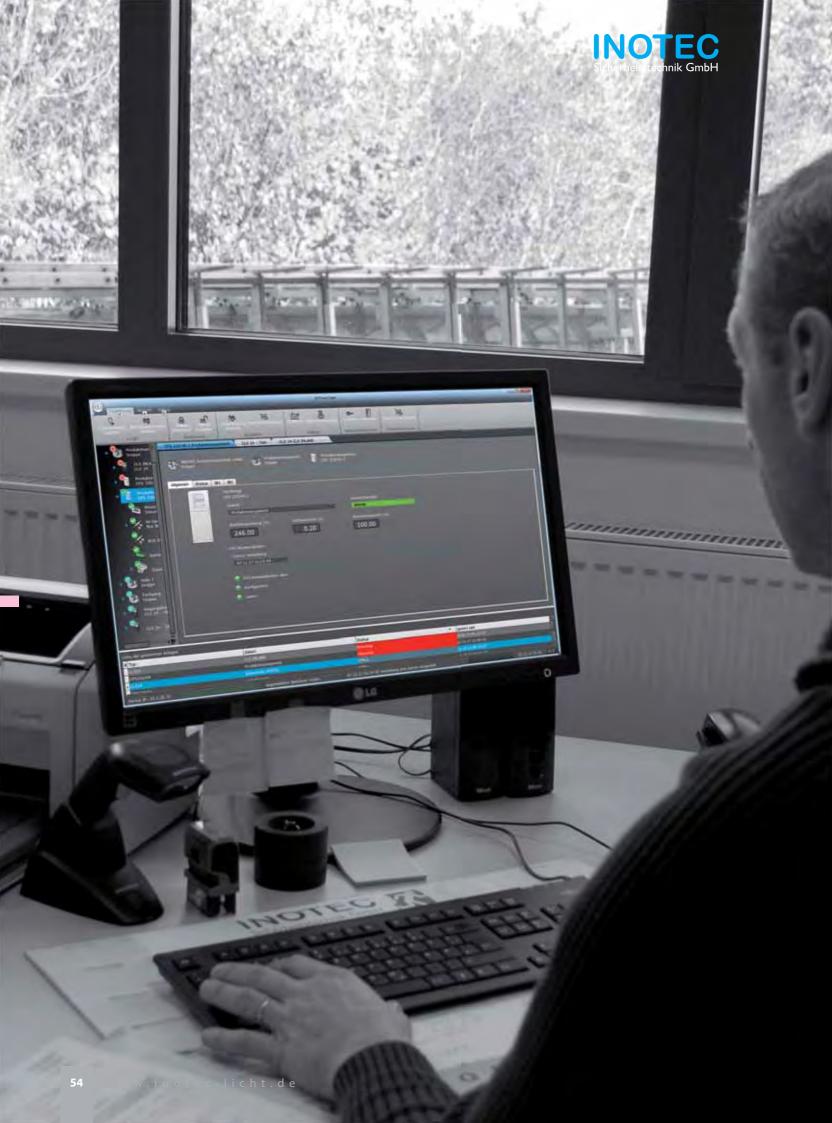


#### Logbook

For emergency and safety lighting systems in DIN A4 folder format. Including templates for commissioning, tests, inspections and maintenance as well as information related to the German regulations, which are currently valid. The back of folder can be labelled with specific project

and system information.

Includes 64 pages and 11 register.





### INOView - Central Monitoring for Emergency Lighting

INOView is the central visualisation solution for all INOTEC emergency lighting systems. All information on the connected systems can be called up in an intuitive interface. Due to its open architecture and multi-user capability, the software is suitable for all project sizes.

#### Advantages

- Central logbook
- Detailed fault information down to luminaire level
- Multi-user operation
- Access authorisation
- E-mail Client
- Client-Server-operation
- Floor plan visualisation
- Monitoring of all INOTEC emergency lighting systems

#### Applications

- Public buildings
- Industry
- Hotels
- Offices
- Meeting places
- Sales premises





### **INOView - A new perspective**

Emergency and safety lighting is used to ensure people' safety in buildings in the event of a power failure or fire. It is essential that the safety equipment is tested, maintained and monitored in accordance with the applicable standards to ensure that this is the case in the event of such an emergency. The results must be recorded accordingly.

The INOView monitoring software from INOTEC supports you to achieve this. A solution that offers a multitude of possibilities, reacts flexibly to the requirements and enables a standard-compliant verification of the system states through the integrated test book.



Monitoring of INOTEC emergency lighting systems CPS 220/64, CPS 220/48.1, CPS 220/20, CPS 220/48, CLS 24, CLS 24.1,

NEA-ICU, NEA, BNS-MTB, LPS24, ELS, CLS FUSION, CPS FUSION, DER 220

- Connection of the devices via network or/and INOTEC RTG-BUS
- Failure information down to luminaire level with destination texts
- Logbook
- Message window of faulty devices

- Group functionality
- Automatic function and duration test programable at project, group and device level
- Simultaneous display of multiple detail views
- Multilinguality
- Access authorisation
- Multi-user operation
- Client-Server operation
- Email notification at status changes
- Floor plan visualisation



## Everything at a glance for personal safety in buildings

The user was in the focus of the development of the visualisation software INOView. It is important to provide simple, intuitive user guidance and transparency through clearly structured system images and clear texts. At just one view, the user recognises the overall status of the safety lighting system and may quickly initiate measures to guarantee personal safety in the building.

The INOView software ensures transparency and provides the user with comprehensive and detailed information about the systems.

#### Modern Client-/Server – architecture

A modern client/server architecture creates future and investment security. From the clients, several users in the network can simultaneously access the information of the INOView software. An integrated user administration protects the software from unauthorised access.

#### Adaptive

Every project is structured individually and has different requirements. You can configure the INOView software to meet your requirements and wishes. The integrated grouping option allows you to structure projects according to your preferences. For example, you can define locations, buildings or responsibilities as a group in which you assign the monitored emergency lighting systems.

#### **Automatic tests**

With automatic tests, the INOView software simplifies the tests and maintenance required by the standards and thus improves the availability of emergency and safety lighting. You can freely define the tests for each device, group or overall project.

#### Powerful and easy to use

With the INOView software, you have your emergency lighting systems clearly and safely "under control". Intuitive operating menus enable simple and convenient operation. Individually configurable visualisations of the information ensure transparency. The software grows with the size of the project. Whether a school or an airport, the INOView software is adapted to the customer's requirements with modern standards.

#### **Overview of benefits**

- Easy to use
- Transparency
- Adaptable, flexible and expandable
- Modern software architecture

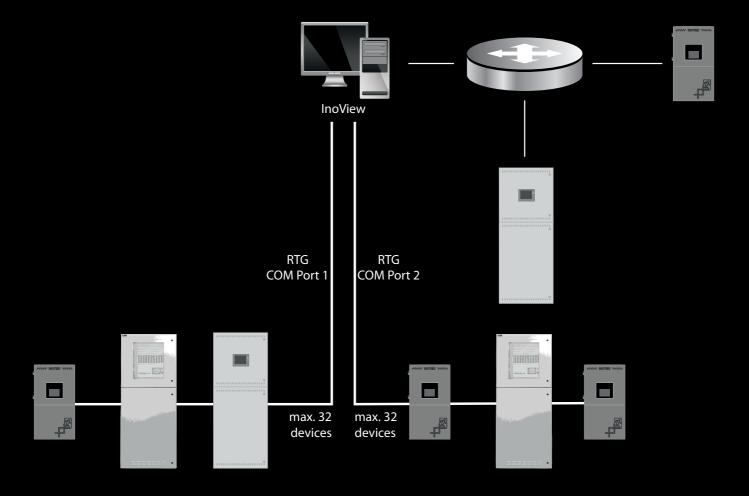


### Installation examples

Client and server components are installed on a PC. The connection of the monitored systems is made via USB or a serial interface for INOTEC RTG-BUS systems or via network connections for devices with a network interface. Access is only from this PC, no network access is provided.

Using the three-core INOTEC RTG-BUS, a free topology with a maximum overall length of up to 500m is possible. The device types can be mixed within one line.

Application examples: Schools, retirement homes, multi-storey car parks, theatres, cinemas, small industrial companies, etc...



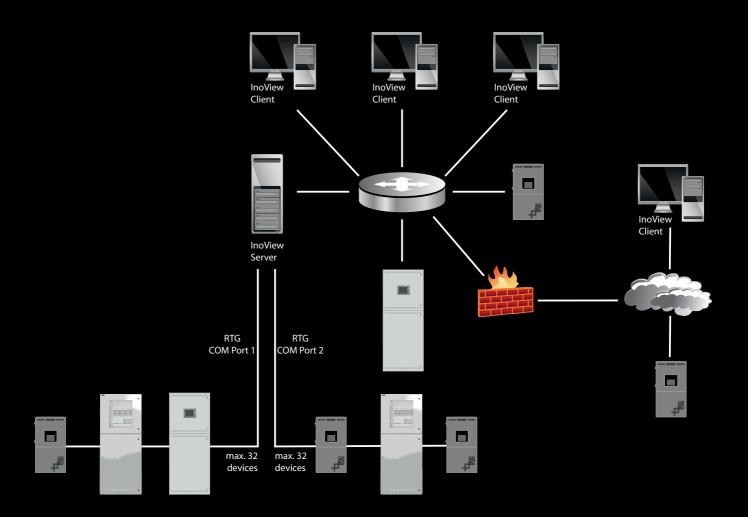


The INOView server is installed on a physical or virtual server, the users get access via client software at their workstation. Several users can work simultaneously with this installation in the network. Several interfaces for monitoring via INOTEC RTG-BUS are connected to the server, further devices are monitored simultaneously by network.

A multi-location monitoring is possible with a company network. This is interesting for industrial or logistics companies with several locations that prefer centralised monitoring, but for example also for the public sector with a central technician who is responsible for several schools.

Using the three-core INOTEC RTG-BUS, a free topology with a maximum overall length of up to 500m is possible. The device types can be mixed within one line.

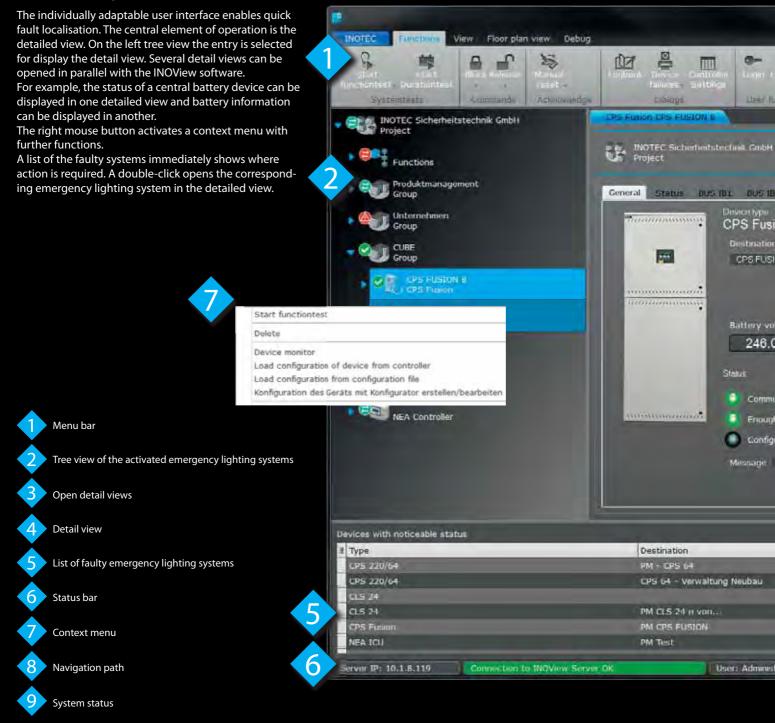
Application examples: Public sector, clinics, industrial companies, airports, logistics centres, etc.





### Overview of the user interface

#### Clear and easy to use





ING	Wnew Class			×
2 DPU/B Information	CPS FUSION 8 CPS Fusion	8		
<b>DN</b> 8		Total status Operation status information	9	
tage [V] Bai	thery current [A]	Battery capacity [%]		
nication active		4		
uration changed	Configuration download			
	Status		Faulty since	
	Plocked Iso failure Failure		13.06.2019 08:05 12.06.2019 10:22 12.06.2019 10:22	
	Offine Offine Failure		12.06.2019 10:22 12.06.2019 10:22 13.06.2019 01:00	
rator	0			13.06.19 08:35 V3.7.2



### Floor plan visualisation

To quickly locate defective luminaires, it is possible to visualise them in a floor plan with their status. One floor plan can be stored per circuit. The vector graphics are based on files in Scalable Vector Graphics Format (SVG), which can be exported from common CAD programs.

The luminaires will be imported from the luminaire database by drag & drop, scaled and aligned.

It is also possible to print out the floor plan with the luminaire status.

The module "floor plan visualisation" is optional.

Position and status of the luminaires.

Luminaire container for placing into

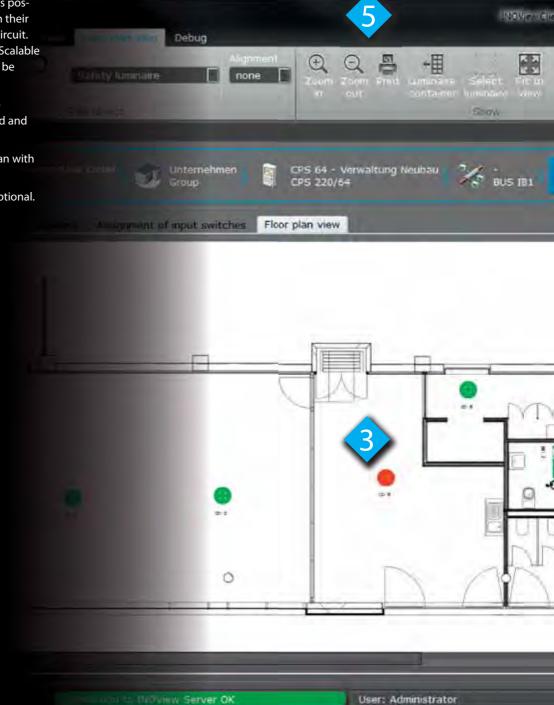
Faulty emergency luminaire

the floor plan

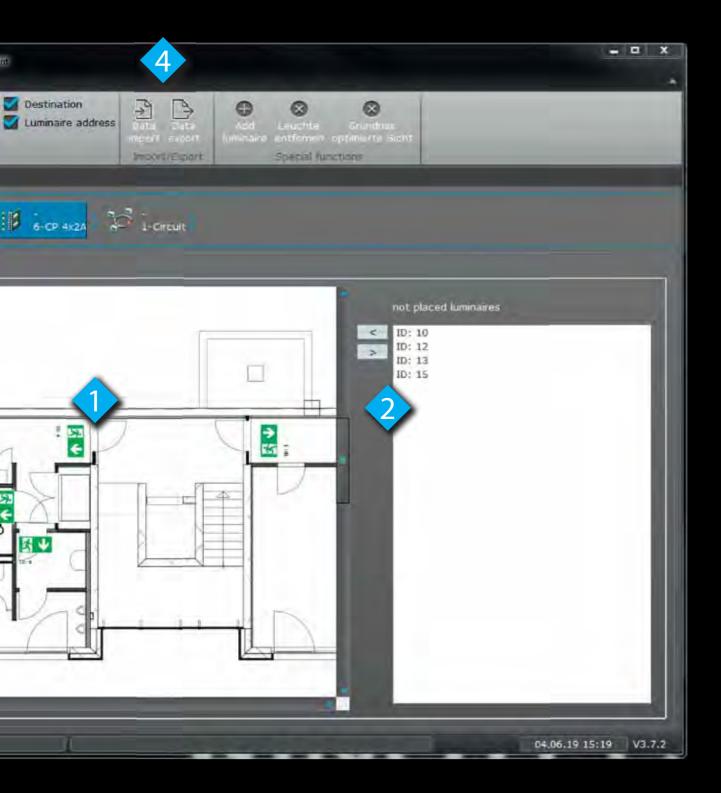
Import floor plans

Printout of the displayed floor plan view

4









### Analysis, log book, fault overview



Simultaneous display of several detail views.

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All faults are displayed in the Device faults dialog. A double-click opens the corresponding fault in the detailed view - a quick and easy troubleshooting.



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Clear logbook view with filter function. The entries can be filtered freely in the table. Output to a printer is also possible.

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The entries in the tables can be grouped or filtered several times using the existing columns. For example, the entries can be grouped by destination of the device and event. Thus a simplified failure analysis is possible.

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Further information can be accessed from the detailed view. Individual luminaire faults are displayed with destination information and can be exported to a printer.



### **INOView Battery monitoring**

Mit Integration des Battery Control Systems (BCS) zur Überwachung jedes einzelnen Batterieblocks in die INOView-Software, ist eine genaue Analyse der aufgezeichneten Daten möglich.

Diagrams visualise very clearly the state of the block voltage and temperature of the battery blocks. The BCS system logs the measurement data daily and from each duration test. The BCSView software, which can be accessed directly from the INOView software, is used to display the information.



#### **User Interface Overview**



**Filter functions** 

Battery block temperature / voltage within a time period

Display of the individual values at a specific period of time

Table with special events

Voltage drop of the battery blocks

For use with the INOView software, the supported systems must be connected via a network.



### **INOView E-Mail notification**

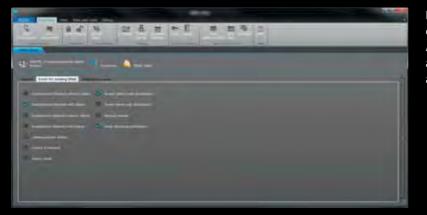
The integrated e-mail function automatically notifies recipients in the event of a fault, power failure or after a function test.



The recipients receive an e-mail with the necessary information and can immediately decide how quickly a response is required.

An SMTP server is required for e-mail functionality.

The INOView software also supports e-mail servers with authentication.



It can be defined exactly after which event a notification is sent by e-mail. Alternatively, a mail can be sent daily at a specified time across all devices with a abnormal status.



### Everywhere in use

INOView supports you in all aspects of ensuring personal safety and simplifies the maintenance and care of emergency and safety lighting.

#### **Schools & Universities**

Every day there are hundreds or even thousands of people in schools and universities. Safety must always be guaranteed during operating hours, making continuous monitoring of emergency and safety lighting necessary. Since these complexes usually extend over several buildings, a central administration optimises the tasks of the technician using INOView software.

In order to prevent battery discharge during downtimes and to reduce operating costs, the emergency lighting systems can be blocked centrally and corresponding areas can be reactivated for evening events.

#### **Transport & Traffic**

Whether airports or railway stations, there are a large number of travellers around the clock. A panic can quickly break out in the event of danger or an emergency. Emergency and safety lighting must function to ensure that people can leave the building safely.

In such objects there are several thousand light points, a central control and maintenance point must keep the overview. INOView shows its strength with its clear structure especially in such projects. The individual grouping options and a clear overview of the existing faults with filter options support you in your daily work.

#### Public buildings, theatres & meeting places

Non-local people stay in public buildings, theatres and meeting places every day. In an emergency, these people must immediately recognise how to leave the buildings safely.

INOView is your tool to simplify the maintenance and care of emergency and safety lighting and ensure safety in the building.

#### **Logistics & Industry**

A central electrical service centre has to take care of the maintenance of several buildings and sites in the logistics and industrial sector. This requires a lot of time. The central monitoring system INOView supports you with important information and clearly structured messages to reduce your workload. Building complexes or locations can be usefully combined using the freely definable groups. Regardless of the device type, you can see in which area a fault is present.









#### **INOView Software**

Monitoring software



INOView – Essential software package

Art. No. 185 405



**INOView software - basic version with soft dongle** Art. No. 185 412



INOView – system credits upgrade Art. No. 185 406



#### INOView floor plan upgrade

Art. No. 185 413



Visualisation software INOView, for centralised remote monitoring of INOTEC emergency lighting systems. The client-/ server- architecture allows access of multiple PCs within the network. The essential version of INOView includes logbook, failure information, automatic tests and 10 system credits for INOTEC emergency lighting systems.

#### System requirements

#### Server:

0	perating	system:

Processor: Memory (RAM): Interfaces: Network: Windows 10 Intel or AMD min. 2GB USB\* , maybe RS 232 TCP/IP

Microsoft Windows 7, Windows

2008 Server, Windows 2012 Server,

#### **Client:**

Operating system:

Processor:	
Memory :	
Network:	

Microsoft Windows 7, Microsoft Windows 8, Windows 10 Intel or AMD min. 2GB TCP/IP

\* Required for USB-Dongle

The INOView system credits upgrade is available to monitor additional INOTEC emergency lighting systems. It's possible to purchase single system credits.

#### **INOView licensing**

The INOView software has to be licensed according to the amount of monitored INOTEC emergency lighting systems. The amount of needed system credits depends on the different device types.

Device type	System credits per device
CPS 220/64, CPUS 220/64, CPS 220/48.1, CPUS 220/48.1, CPS 220/48, CPUS 220/48 CPS 220/20 CPS FUSION DER 220	3
CLS 24/CLS 24.1, CLS 24-7Ah, CLS FUSION	1
NEA, LPS 24, BNS-MTB, NEA-ICU, ELS	2

#### **INOView accessories**

Components



Standard network interface to INOTEC RTG-BUS for connection of INOTEC emergency lighting systems. RJ45 interface for connection to existing ethernet. Suitable for DIN-rail mounting.

#### **Technical data**

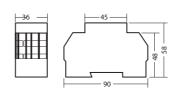
Material:	Polycarbonate
Nominal voltage:	24V ±10%
Power consumption:	1,7 VA
Terminals:	2,5mm <sup>2</sup> single-o
	1,5mm <sup>2</sup> multi-c
Perm. temperature	-15°C+40°C
range:	
Protection category:	IP20
Protection class:	III
Acc. to DIN EN 55015	
Mounting:	DIN rail mountii

Polycarbonate 24V ±10% 2,7 VA 2,5mm<sup>2</sup> single-core 1,5mm<sup>2</sup> multi-core with ferrule 15°C...+40°C P20 II DIN rail mounting

#### INOLan.2

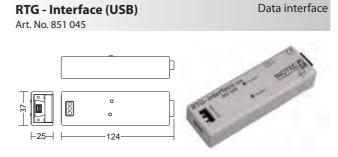
Art. No. 990 253

#### Data interface





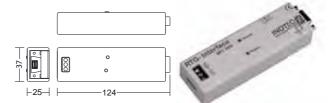
RTG interface for connection of up to 32 INOTEC emergency lighting systems to a PC via USB- or serial RS232- interface. Included in delivery: 1x Power supply 1x Connection cable 1m 1x Driver-CD for RTG – Interface (USB)



#### **Technical data**

Material: Nominal voltage: Terminals: Perm. temperature range: Protection category: Protection class: Acc. to DIN EN 55015 Polycarbonate 230V ±10%, 50/60Hz 2,5mm<sup>2</sup> -15°C...+40°C

IP20 II/III **RTG - Interface (RS 232)** Art. No. 851 044 Data interface



#### **INOView accessories**

Components



#### **Dongle Device Server**

Art. No. 185 050

optional accessory



#### **INOView ZLT-Interface**

Art. No. 990 227

optional accessory

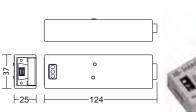


		1	

**IB-Interface (USB)** 

Art. No. 851 049

optional accessory





#### is installed on a virtual machine. The integration is done by network connection and a software within the virtual machine.

Dongle Device Server for integration into a virtual network

environment. This component is needed, if the INOView server

#### System requirements

Operating systems:	32/64
	7, Wi
	2008
Network interfaces:	10Ba
Interfaces:	2xUS

4-Bit: Windows XP, Windows indows 10, Windows Server 3, Windows Server 2012 seT/100BaseTX/1000BaseT 2xUSB 2.0

INOView ZLT-Interface to communicate fault reports to the existing BMS. Suitable to connect to a remote switch as well as to loop monitoring. Five potential free contacts programmable for operation, failure (general) and 2 freely. Installed in distribution board, incl. power supply (146030)

#### **Technical data**

Material:	Polycarbonate
Nominal voltage:	230 V ± 10%, 50/60 Hz
Terminals:	2,5 mm <sup>2</sup>
Perm. temperature	-15 °C +40 °C
range:	
Protection category:	IP30
Protection class:	III
Acc. to to DIN EN 55015	

The IB-Interface is a communication interface between INOView(180405) and ZLT-Interface(990227). Included in delivery: 1x Power supply 1x Connection cable 1m 1x Driver - CD

Material:	Polycarbonate
Nominal voltage:	230 V ±10%, 50/60Hz
Terminals:	2,5 mm²
Perm. temperature	-15 °C +40 °C
range:	
Protection category:	IP20
Protection class:	11/111
Acc. to DIN EN 55015	



### **Regulations and Standards**

### What you need to know about emergency luminaires and exit signs

The following pages list the regulations and standards that apply to safety and emergency exit luminaires. These can be divided into lighting and electrical standards.



#### **Lighting standards**

EN 1838	Lighting applications. Emergency lighting
DIN 4844-1 / ISO3864	Graphical symbols - Safety colours and safety signs
DIN 4844-2	Graphical symbols - Safety colours and safety signs
DIN 4844-3	Graphical symbols - Safety colours and safety signs
ASR A1.3	Health and safety signs
ISO 7010	Graphical symbols – Safety colours and safety signs

#### **Electrical standards**

EN 60598-1	Luminaires – Part 1: General requirements and tests (10/15)
EN 60598-2-22	Luminaires – Part 2-22: Particular requirements – Luminaires for emergency lighting
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting
	and similar equipment

### Lighting requirements for escape-routes according to EN 1838 10/2013

When the emergency lighting is in operation, the luminance of the safety colour must be at least  $2 \text{ cd/m}^2$  at every point of the sign.

The colours must meet the requirements of ISO 3864.

A lamp's colour-rendering index, Ra, must be equal to at least 40.

The ratio of the luminance Lcontrast to the luminance Lsafety colour must be no less than 5:1 and no more than 15:1.

The ratio of the maximum luminance to the minimum luminance must not exceed 10:1 either within the white surface or within the safety colour.

Safety and exit sign luminaires have to be illuminated or by an internal or external illuminant. Fluorescent signs aren't allowed.

The light requirements of the standard are minimum values that EW 35m  $\rightarrow$  h<sub>max</sub> = 14.7m also have to be achieved at the end of life of every component.

The planning of emergency light must be based on the worst environmental conditions for the entire expected lifetime (e.g. highest glare, minimum luminous flux (self-contained luminaires, light output reduced ballasts)).

For direct illuminating luminaires only the direct light has to be considered. Reflected light of surroanding walls must be neglected.

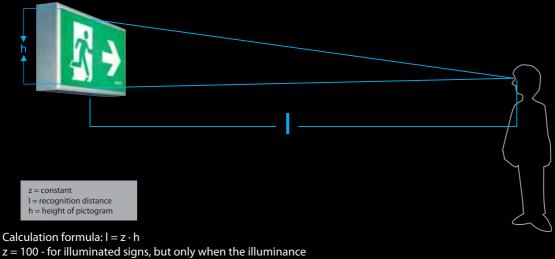
For indirect illuminating luminaires and ceiling floodlight, always working with a reflecting surface, only the first reflection must be considered.

If possible safety signs shouldn't be mounted higher than 20° above the horizontal viewing line with respect to the maximum viewing distance.

Example: Viewing person 2m tall EW 20m  $\rightarrow$  h<sub>max</sub> = 9.2m EW 35m  $\rightarrow$  h<sub>max</sub> = 14.7m



# Viewing distance according to EN 1838 10/2013 and DIN 4844-1 06/2012



on the surface of the sign is  $E \ge 50$  k.

z = 200 - for backlit signs (pictogram luminaires), but only when the luminance is L  $\geq$  500cd/m<sup>2</sup> in mains operation.

### Rule of thumb:

Pictogram signs need to be twice as large as pictogram luminaires at the same recognition distance.

## Note:

With the luminance L=500 cd/m<sup>2</sup> given above, the pictogram should be sufficiently recognisable in bright surroundings. In order to avoid glare effects, the luminance needs to be reduced in dark surroundings, for instance by the use of INOTEC pictogram luminaires with adjustable light output in monitored LED technology.

# **Emergency signs according to ISO 7010**

Examples



The arrows may only be used in conjunction with an additional exit pictogram and vice-versa.

The arrows may be rotated in 45° increments.

In combination signs, the light edges between the pictograms may be omitted.

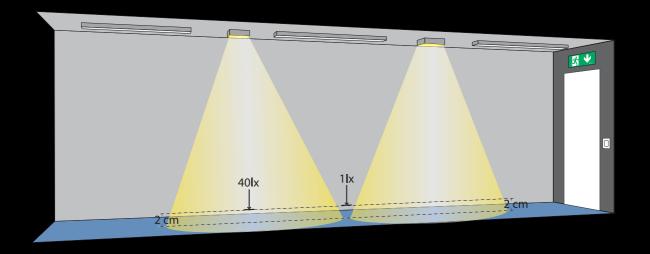




# **Emergency lighting for escape routes**

For escape routes with a width of up to 2m, the horizontal illuminance on the floor along the central line of the escape route must be no less than 1lx, and the central area, corresponding to no less than half the width of the escape route, must be illuminated with at least 50% of this value.

The ratio of the maximum illuminance to the minimum illuminance must not exceed 40:1 along the central line of the escape route.



Type of lighting	Required illuminance		Uniformity (Emin/Emax)
Safety lighting for escape routes:	1 lux (*2) along the central line of the	emergency route	1:40
Safety lighting for hazardous areas:	10% of general lighting, minimum 15	5 lux (*2)	1:10
Open space lighting:	Minimum 0.5 lux (*2) on the free floo	r surface	1:40
Type of lighting	Rated operating time	Response time	(*1)
Safety lighting for escape routes:	At least 1 hour	50% of E <sub>min</sub> within 5 s (for German workplace	seconds, 100% within 60s es, 100% within 15s)
Safety lighting for phazardous areas:	The rated operating time must correspond to the length of time for which danger exists for humans	The required illuminar present or achieved w	nce must be permanently ithin 0.5 seconds
Anti-panic lighting:	At least 1 hour	50% of E <sub>min</sub> within 5 s 100% within 60 secon	

(\*1) Interval between failure of the general lighting and achievement of required

illumination level by the emergency lighting (\*2) Measurement plane  $\leq 2$  cm above the floor.

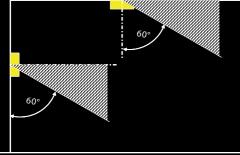


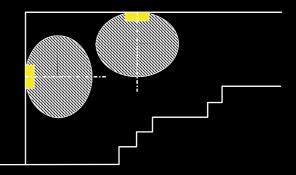
# **Physiological glare**

Physiological glare must be kept low by limiting the luminosity of the luminaires within the field of vision.

For escape routes that run horizontally, the luminosity within an area of 60° to 90° to the vertical must not exceed the values in the table for all azimuth angles. For all other escape routes and open areas, the limits must not be exceeded for any angle.

# Limits for physiological glare





Mounting height above the ground h	Maximum luminosity for escape route and open area emergency lighting l <sub>max</sub>	Maximum luminosity for safety lighting for hazardous areas I <sub>max</sub>
m	cd	cd
h < 2.5	500	1000
2.5 ≤ h < 3.0	900	1800
$3.0 \le h < 3.5$	1600	3200
$3.5 \le h < 4.0$	2500	5000
$4.0 \le h < 4.5$	3500	7000
h ≥ 4.5	5000	10000



# Spots to be highlighted according to EN 1838



at least 2m above the ground



close to (\*1) each first-aid station (\*2)

close to (\*1) any firefighting or alarm device





Safety signs and directional emergency escape route signs have to be illuminated or backlit in emergency mode. Photoluminescent signs are not allowed.

at each exit door which can be

used in emergency

close to (\*1) stairs, in order to illuminate each step directly



 $\otimes$ 

anti-panic lighting in disabled toilets

close to (\*1) safe areas for handicapped people and intercoms for these as well as alarm devices for disabled toilets

close to (\*1) evacuation devices

for handicapped people



close to (\*1) any level change within the escape route

at each change of direction



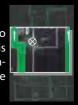


at each intersection of corridors / passages

outside and close to (\*1) every emergency exit door up to a safe area



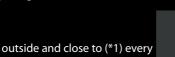
anti-panic lighting on paths to areas where safety lighting is required, but not directly adjacent to an escape route



\*1 max. 2m horizontal distance \*2 vertical illuminance 5lx

# **Electrical standards**

The electrical standards are taken into account in INOTEC's own construction and development and monitored by our quality control. We guarantee that all INOTEC luminaires comply with the current standards and regulations. You can find the corresponding declarations of conformity on our homepage.





# Special colours The choice is yours ...

If an INOTEC luminaire needs to be colour-matched to customer requirements, INOTEC offers two options: the standard powder coating or the INOTEC high-performance powder coating system.

All luminaires which are used indoors without special stress (IP 4x) can be painted with the standard powder coating. By selecting the appropriate RAL colour, the luminaires can be customised to suit the architecture and colour scheme of the building.

If luminaires with a high degree of protection are required, the INOTEC high-performance powder coating system is used. This coating is a 2-layer powder coating with excellent corrosion protection. INOTEC luminaires with the high-performance powder coating system are ideal for use in rough environments - in- and outdoor. These luminaires can be used in industrial plants, swimming pools or facades without any problems.

Even ander strong weather conditions, such as sunlight, temperature and humidity, there is no change in the surface or optical reduction for years. Even aggressive liquids do not damage the high-performance powder coating. By pre-treating the surfaces accordingly, even scratches in the powder coating cannot be infiltrated by rust.

# **Environmentally friendly and economical**

Coatings without solvent emission? Powder coatings make it possible! Powder coatings do not produce any solvent emissions compared to wet coating processes. Therefore the INOTEC powder coatings comply with the EU directives\* regarding VOC\*\*. In addition, there are numerous other environmentally relevant advantages of powder coating systems: No waste water is generated during processing, and due to a very high application efficiency (up to 98 %), the amount of waste generated during powder coating processing is very low.

\* Ratified in Germany under 31. BlmSchV \*\* The abbreviation VOC (Volatile Organic Compounds) refers to the group of volatile organic compounds (e.g. solvents).



# Lighting technology

# Measures and units of light

# Luminous flux Φ (lumen)

The luminous flux measures the total light output emitted in a spherical radius by the illuminant. It is adjusted to reflect the varying sensitivity of the human eye to different light wavelengths.

The luminous flux is indicated in lumen (lm).



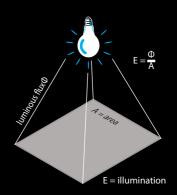
# Illuminance E (lux)

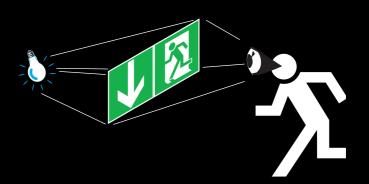
Illuminance is a deciding factor in our visual performance. Illuminance therefore has a major influence on how quickly and safely people can leave a building in an emergency. Illuminance indicates the relationship of the luminous flux falling perpendicularly on a surface to the illuminated surface. Under EN 1838, the minimum illuminance is 1 lux, measured on the central line of the escape route. The maintenance factor must also be taken into consideration. For our spacing tables, we base our calculations on a maintenance factor of 0.8, producing a minimum illuminance of 1.25 lux. Illuminance is measured with a lux meter at a height of 2cm above the ground.

# Luminance L (candela / m<sup>2</sup>)

Luminance is the luminous intensity of a surface. The surface can produce the light itself, or be backlit or illuminated.

In accordance with DIN prEN 1838, the luminance of the safety colour must be at least 2 cd/m<sup>2</sup> at every point of the sign, from every relevant viewing direction.





# Some facts about LEDs

IINOTEC has many years of experience working with LEDs. Thanks to ongoing developments, LEDs offer countless new possibilities in luminaire design.

# How a LED works

LED is the abbreviation of Light Emitting Diode.

A LED is a semiconductor diode that emits light when operated in the conducting direction (anode [+] -> cathode [-]). The light's wavelength essentially depends on the semiconductor material used and on its doping.

Nowadays, LEDs can reach a luminous flux of more than 120lm/ watt. These figures are manufacturer's specifications, measured under laboratory conditions (25°C chip temperature and a current of 350mA).

# **Service life**

The LEDs used by INOTEC have an average service life of approx. 50,000h. To achieve this service life, good thermal management is required, as a LED's service life essentially depends on the temperature and the current flowing through it.

# **LEDs and PCBs**

INOTEC emergency exit and safety luminaires use PCBs (printed circuit boards) that have been specially developed for luminaires, fitted with SMD (surface mount) LEDs. This means that the LED can be perfectly matched to the luminaire design. Secondary optics are used to optimise the light distribution of the LED illuminant for the various areas of application.

# **LED** power supplies

The LEDs are operated with INOTEC constant current power supplies. PSUs with different performance classes were developed for the various application areas, suitable for connection to central and low power supply systems under DIN VDE 0108 and EN 50171. Depending on the version, the LED PSUs also come with integrated Joker technology and individual lamp monitoring.

Furthermore, the luminaires can be dimmed in mains operation and automatically switch to 100% in emergency operation.



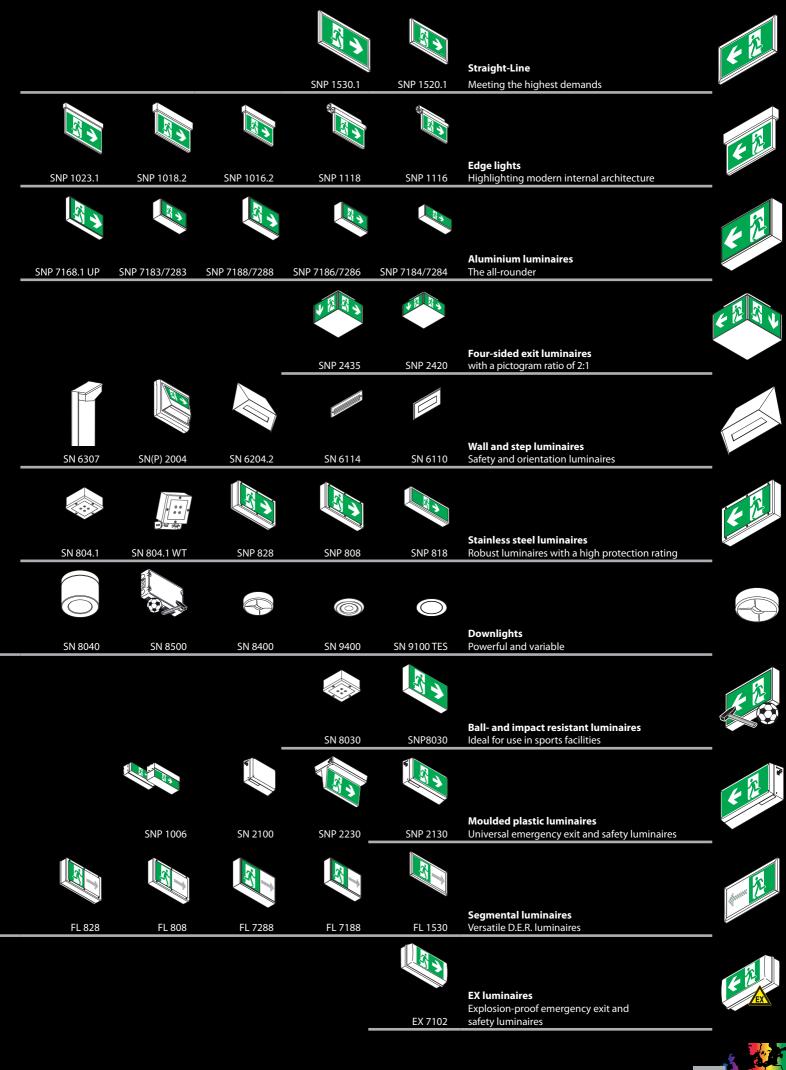


# Contents



SN 2040.1





Contacts Luminaire categories 81





# Straight-Line Meeting the highest demands

Besides the high quality and ease of installation, the INOTEC emergency exit sign luminaires of the "Straight-Line" series suit perfectly to modern architectures. The luminaires impress with their slim design and homogeneous illumination. Thanks to their high luminance > 500cd/m<sup>2</sup>, these luminaires are ideally suited for use in bright environments and thus meet the requirements of DIN 4844-1.

# Advantages

- State-of-the-art lighting technology
- High quality materials
- Attractive design
- Easy installation
- Easily exchangeable legend panel

# **Applications**

- Public buildings with elegant room architecture
- Offices
- Commercial properties
- Theater
- Shop premises
- VIP-areas
- Hotels
- etc.





J/SV

SNP 1520.1 Straight-Line For connection to JOKER-central battery systems





Straight-Line high quality emergency exit luminaires, made of powder coated aluminium profile of just 14.5mm thickness. Slim design and brilliant illumination by cutting-edge fibre optics technology with a luminance of >500cd/m<sup>2</sup>.

# **Technical data**

Viewing distance:	20 m	Apparent power:	4,1 VA
Material:	Aluminium powder-coated	Effective power:	3,5 W
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	18 mA	Temperature ta:	-15+40 °C
Nominal current DC:	14 mA		

Add colour code to the article no. e.g. 800 014 LXX **Available colours** 

RAL 7015 (Slate grey): L16 RAL 9016 (Traffic white): L04

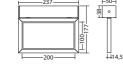
Special colour: L99 💋

## Articles

SNP	1520.1	D/WA	LED J/SV

Wall bracket or ceiling mounting





Protection category: IP40

Art. no. 801 403

# SNP 1520.1 ES LED J/SV

Recessed cable suspension



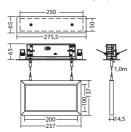
# SNP 1520.1 PM LED J/SV

Parallel wall mounting



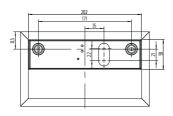
Art. no. 801 417

# Protection category: IP40



Art. no. 801 400

Protection category: IP40



# SNP 1520.1 E LED J/SV

Recessed ceiling mounting



# **SNP 1520.1 P LED J/SV**

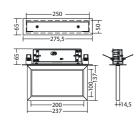


# SNP 1520.1 S LED J/SV

### Cable suspension mounting



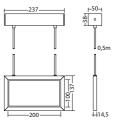
Protection category: IP40



### Art. no. 801 409

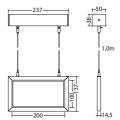
Art. no. 801 414

Protection category: IP40



# Art. no. 801 406

Protection category: IP40



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# Quality and efficiency

# **High quality materials** The INOTEC Straight-Line, made of high-quality aluminium profiles, impresses with a flat design and homogeneous illumination. Due to their high luminance > 500cd/m<sup>2</sup>, these luminaires are ideally suited for use in bright environments and thus meet the requirements of the standard. INOTEC State-of-the-art lighting technology Thanks to state-of-the-art light guide technology, the luminous flux of the LEDs is optimally used, with the result that the power consumption of the Straight Line is significantly lower than that of a conventional emergency exit sign luminaire with 8 W

fluorescent lamp. A screened light guide panel inside the luminaire ensures uniform and bright illumination of the pictogram panels.

This system also makes it possible to change the pictogram screens easily and without tools.



# SNP 1520.1 Straight-Line

For connection to JOKER-central battery systems



Art. no. 890 435

# SNP 1520.1 WE LED J/SV

# Art. no. 801 412

# Recessed wall mounting

Protection category: IP40

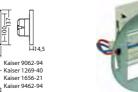
200

APPA

# LED-Supply 230-3 J-SV SK I UP

# required













.



SNP 1530.1 Straight-Line

For connection to JOKER-central battery systems





Straight-Line high quality emergency exit luminaires, made of powder coated aluminium profile of just 14.5mm thickness. Slim design and brilliant illumination by cutting-edge fibre optics technology with a luminance of >500cd/m<sup>2</sup>.

## **Technical data**

Viewing distance:	30 m	Apparent power:	5,2 VA
Material:	Aluminium powder-coated	Effective power:	4,3 W
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	23 mA	Temperature ta:	-15+40 °C
Nominal current DC:	18 mA		

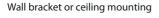
Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 7015 (Slate grey): L16

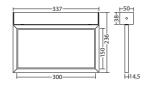
RAL 9016 (Traffic white): L04 📃 🦳 Special colour: L99 💋

### Articles

SNP 1530.1 D / WA LED J/SV	/









Recessed cable suspension



## SNP 1530.1 PM LED J/SV

Parallel wall mounting

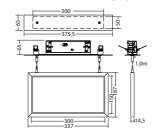


Art. no. 801 437

Art. no. 801 423

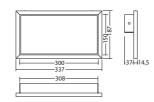
Protection category: IP40

## Protection category: IP40



Art. no. 801 420

Protection category: IP40



# SNP 1530.1 E LED J/SV

Recessed ceiling mounting



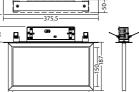
**SNP 1530.1 P LED J/SV** 

Pendulum mounting

# Art. no. 801 434

Protection category: IP40





Art. no. 801 429

Protection category: IP40

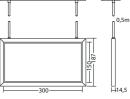


# SNP 1530.1 S LED J/SV

### Cable suspension mounting

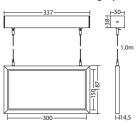


-38-



## Art. no. 801 426

Protection category: IP40





# Versatile and ergonomic

0

# Attractive design

Thanks to its slim design and 6 different mounting possibilities, the Straight-Line offers numerous possibilities for elegantly integrating emergency and safety lighting into the architecture and structural conditions. INOTEC

INOTEC

INOTEC

## **Tool-free assembly**

The luminaire is mounted conveniently without tools using a pluggable two-point mounting system. First fasten the mounting unit, connect the cable and then plug in the lighting module.



# SNP 1530.1 Straight-Line

For connection to JOKER-central battery systems



Art. no. 890 435

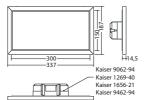
# SNP 1530.1 WE LED J/SV

# Art. no. 801 432

# Recessed wall mounting

Protection category: IP40





# LED-Supply 230-3 J-SV SK I UP

## required









# Edge lights The highlight of modern room architecture

The INOTEC edge lights with freely suspended pictogram screens offer more than perfect safety technology, they set clear accents.

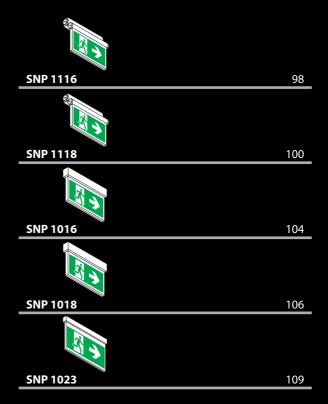
With trend-setting technologies and premium materials in elegant design, the luminaires set standards in functionality, flexibility and standard-compliant illumination.

# Advantages

- Attractive design
- Easily exchangeable legend panel
- Tool-free opening

# Applications

- Public buildings with elegant room architecture
- Offices
- Shop premises
- Conference facilities
- VIP-areas
- Hotels
- etc.



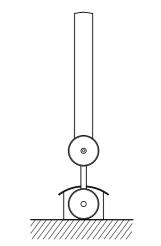




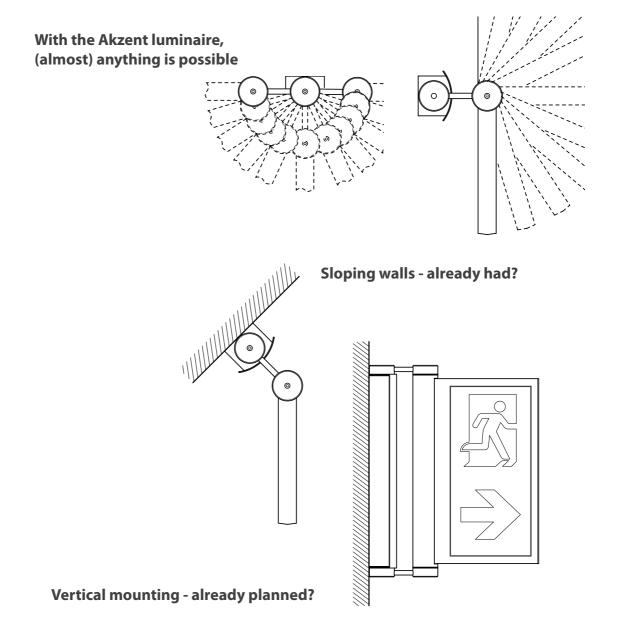


# Set accents

The INOTEC edge light luminaires SNP 1116 and SNP 1118 convince in function, luminous intensity, service life and design. The high-quality stainless steel luminaires are highly flexible with the adjustable pictogram and are therefore suitable for almost any mounting situation. Thus, the optimum solution for every wall and room situation can also be found retrospectively.



Upside down - seen it already??



J/SV For connection to JOKER-central battery systems





High quality, versatile LED edge lights made of brushed stainless steel.Homogeneous illumination of the frameless, free hanging 20 mm acrylic legend panel by state-of-the-art LED technology.

## **Technical data**

Viewing distance:	22 m	Nominal current DC:	17 mA
Material:	Stainless steel brushed	Apparent power:	4,5 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	20 mA	Temperature ta:	-15+40 °C

## Articles

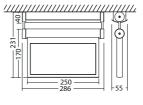
SNP 1116 D LED J/SV

Wall or ceiling mounting



Protection category: IP20

Art. no. 801 185



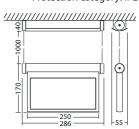
## SNP 1116 S LED J/SV

Cable suspension mounting



Protection category: IP20

Art. no. 801 585

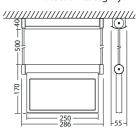


Protection category: IP20

Art. no. 801 485



SNP 1116 P LED J/SV



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Name



For connection to JOKER-central battery systems





High quality, versatile LED edge lights made of brushed stainless steel.Homogeneous illumination of the frameless, free hanging 20 mm acrylic legend panel by state-of-the-art LED technology.

# **Technical data**

Viewing distance:	22 m	Nominal current DC:	17 mA
Material:	Stainless steel brushed	Apparent power:	4,5 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	20 mA	Temperature ta:	-15+40 °C
Available colours Add colour code to the article no. e.g. 800 014 LXX			

Special colour: L99 💋 stainless steel: L30

# Articles



J/SV For connection to JOKER-central battery systems





High quality, versatile LED edge lights made of brushed stainless steel.Homogeneous illumination of the frameless, free hanging 20 mm acrylic legend panel by state-of-the-art LED technology.



## Technical data

Viewing distance:	30 m	Nominal current DC:	22 mA
Material:	Stainless steel brushed	Apparent power:	5,3 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	23 mA	Temperature ta:	-15+40 °C

### Articles

SNP 1118 D LED J/SV

Wall or ceiling mounting



# SNP 1118 S LED J/SV

Cable suspension mounting

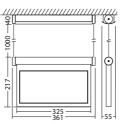


Art. no. 801 595

Art. no. 801 195

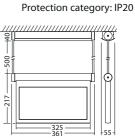
Protection category: IP20

Protection category: IP20









Art. no. 801 495

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For connection to JOKER-central battery systems





High quality, versatile LED edge lights made of brushed stainless steel.Homogeneous illumination of the frameless, free hanging 20 mm acrylic legend panel by state-of-the-art LED technology.

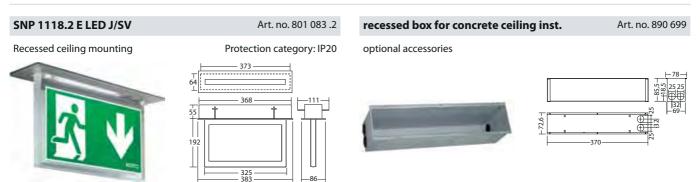
# **Technical data**

Viewing distance:	30 m	Nominal current DC:	22 mA
Material:	Stainless steel brushed	Apparent power:	5,3 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	23 mA	Temperature ta:	-15+40 °C

**Available colours** Add colour code to the article no. e.g. 800 014 LXX

stainless steel: L30 Special colour: L99 💋

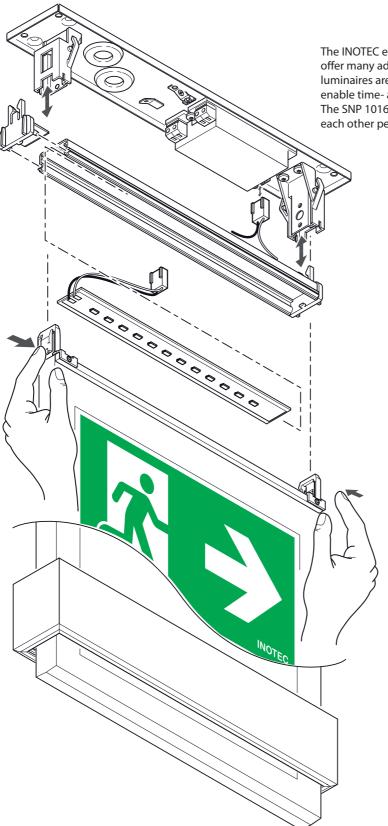
# Articles







# The installation-friendly eye-catcher



The INOTEC edge light luminaires SNP 1016 and SNP 1018 offer many advantages with their screwless connections. The luminaires are made from high-quality aluminium profiles and enable time- and cost-saving installation and maintenance. The SNP 1016 and SNP 1018 edge light luminaires complement each other perfectly in terms of functionality and comfort. J/SV For connection to JOKER-central battery systems





Functional edge lights made of high quality aluminium profile. Homogeneous illumination of the frameless, free hanging 20 mm acrylic pictogram oder legend panel by state-of-the-art LED technology.

## **Technical data**

Viewing distance:	22 m	Nominal current DC:
Material:	Aluminium	Apparent power:
Illuminant:	LEDs	Inrush current:
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:
Nominal voltage DC:	176 - 264 V	Input terminals:
Nominal current AC:	20 mA	Temperature ta:

Nominal current DC:	17 mA
Apparent power:	4,5 VA
Inrush current:	8 Α / 50 μs
Protection class:	I
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C

## Articles

SNP 1016.2 D LED J/SV

Ceiling mounting





250 275

203

-54-

Art. no. 801 363 .2

Art. no. 801 163 .2

### SNP 1016.2 PM LED J/SV

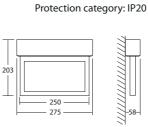
Parallel wall mounting



# SNP 1016.2 WA LED J/SV

Wall bracket mounting





Art. no. 801 263 .2

Protection category: IP20

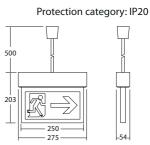


SNP 1016.2 P LED J/SV

# SNP 1016.2 S LED J/SV

Cable suspension mounting

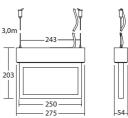




## Art. no. 801 464 .2

Art. no. 801 463 .2

Protection category: IP20



223

250 304



For connection to JOKER-central battery systems





Functional edge lights made of high quality aluminium profile. Homogeneous illumination of the frameless, free hanging 20 mm acrylic pictogram oder legend panel by state-of-the-art LED technology.

## **Technical data**

J/SV

Viewing distance:	22 m	Nominal current DC:	17 mA
Material:	Aluminium	Apparent power:	4,5 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	20 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 🛛 Special colour: L99 💋

## Articles



J/SV For connection to JOKER-central battery systems





Functional edge lights made of high quality aluminium profile. Homogeneous illumination of the frameless, free hanging acrylic pictograph by state-of-theart LED technology.



## **Technical data**

Viewing distance:	30 m
Material:	Aluminium
Illuminant:	LEDs
Nominal voltage AC:	230V ±10% 50/60 Hz
Nominal voltage DC:	176 - 264 V
Nominal current AC:	23 mA

249

249

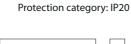
Nominal current DC:	22 mA
Apparent power:	5,3 VA
Inrush current:	8 A / 50 μs
Protection class:	1
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C

## Articles

SNP 1018.2 D LED J/SV

Ceiling mounting





Art. no. 801 169 .2

Art. no. 801 369 .2



# SNP 1018.2 PM LED J/SV

Parallel wall mounting



SNP 1018.2 WA LED J/SV

Wall bracket mounting

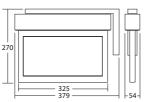




Protection category: IP20

Art. no. 801 269 .2

Protection category: IP20



# SNP 1018.2 P LED J/SV

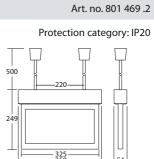
Pendulum mounting



# SNP 1018.2 S LED J/SV

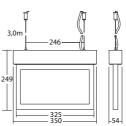
Cable suspension mounting





## Art. no. 801 468 .2

Protection category: IP20

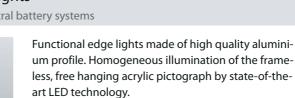


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# SNP 1018.2 E Edge lights

For connection to JOKER-central battery systems







## **Technical data**

Viewing distance:	30 m	Nominal current DC:	22 mA
Material:	Aluminium	Apparent power:	5,3 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	23 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 🛛 Special colour: L99 💋

## Articles











Functional edge lights made of high quality aluminium profile. Homogeneous illumination of the frameless, free hanging acrylic pictograph by state-of-theart LED technology.

#### **Technical data**

J/SV

Viewing distance:	50 m	Nominal current DC:	85 mA
Material:	Aluminium	Apparent power:	21,6 VA
Illuminant:	LEDs	Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	94 mA		

#### Articles

SNP 1023.1 D LED J/SV	Art. no. 801 760	SNP 1023.1 E LED J/SV	Art. no. 801 764
Ceiling mounting	Protection category: IP20	Recessed ceiling mounting	Protection category: IP20
	5 <u>8</u> 580 541	62	$\begin{array}{c} 5 \\ \hline \hline$
SNP 1023.1 P LED J/SV	Art. no. 801 762	SNP 1023.1 PM LED J/SV	Art. no. 801 766
Pendulum mounting	Protection category: IP20	Parallel wall mounting	Protection category: IP20
			580 54





# Aluminium luminaires The all-rounders

The INOTEC aluminium profile luminaires are especially characterised by their versatile application possibilities. Due to the different housing sizes and the possibility of individual colour design, the aluminium profile luminaires can be well adapted to the interior architecture of the building.

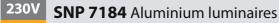
#### **Advantages**

- Attractive design
- Easily exchangeable pictograms
- Tool-free opening

#### **Applications**

- Public buildings with elegant room architecture
- Offices
- Shop premises









Single sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of  $> 500 \text{ cd/m}^2$ .

#### **Technical data**

Material:AluminiumApparent power:5,0 VAIlluminant:LEDsInrush current:8 A / 50 μsNominal voltage AC:230V ±10% 50/60 HzProtection class:I
Nominal voltage AC:   230V ±10% 50/60 Hz   Protection class:
-
Nominal voltage DC:176 - 264 VInput terminals:2.5mm² feed through wiring
Nominal current AC:22 mATemperature ta:-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

#### Articles

#### SNP 7184 LED J/SV

Wall mounting

Protection category: IP40





**SNP 7284** Aluminium luminaires

For connection to JOKER-central battery systems





Double-sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of > 500 cd/m<sup>2</sup>.

#### **Technical data**

Viewing distance:	12 m	Nominal current DC:	18 mA
Material:	Aluminium	Apparent power:	6,1 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	27 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

#### Articles

#### SNP 7284 D LED J/SV

Ceiling mounting

Protection category: IP40



















Single sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of  $> 500 \text{ cd/m}^2$ .

#### **Technical data**

Viewing distance:	20 m	Nominal current DC:	12 mA
Material:	Aluminium	Apparent power:	5,0 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	22 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

#### Articles

#### SNP 7186 LED J/SV

Wall mounting

Protection category: IP40



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12		
	253	0







Double-sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of > 500 cd/m<sup>2</sup>.

#### **Technical data**

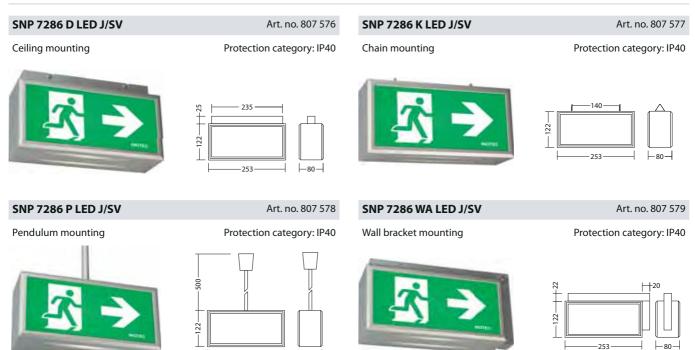
J/SV

Viewing distance:	20 m	Nominal current DC:	18 mA
Material:	Aluminium	Apparent power:	6,1 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	27 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

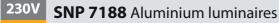
Special colour: L99 💋

#### Articles



-80-

- 253







Single sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of  $> 500 \text{ cd/m}^2$ .

#### **Technical data**

	5 m	Nominal current DC:	18 mA
Material: Alu	luminium	Apparent power:	6,1 VA
Illuminant: LE	EDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC: 23	30V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC: 17	76 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC: 27	7 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

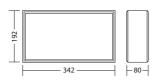
#### Articles

#### SNP 7188 LED J/SV

Wall mounting

Art. no. 807 372 Protection category: IP40











Double-sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of > 500 cd/m<sup>2</sup>.

#### **Technical data**

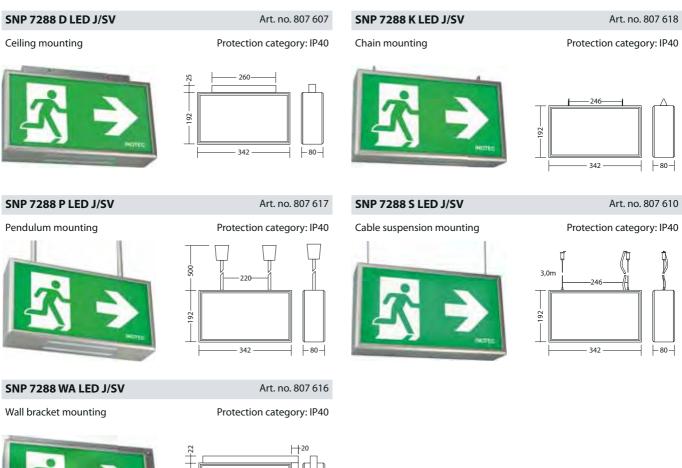
J/SV

Viewing distance:	35 m	Nominal current DC:	32 mA
Material:	Aluminium	Apparent power:	8,3 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

#### Articles



- 80 -

192.

342

www.inotec-licht.de 119







Single sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of  $> 500 \text{ cd/m}^2$ .

#### **Technical data**

Viewing distance:	60 m	Nominal current DC:	32 mA
Material:	Aluminium	Apparent power:	8,3 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

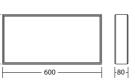
#### Articles

#### SNP 7183 LED J/SV

Wall mounting

Protection category: IP40









Double-sided aluminium profile emergency exit luminaires with additional light output at bottom side. Homogeneous illumination by state-of-the-art LED technology with a luminance of > 500 cd/m<sup>2</sup>.

#### **Technical data**

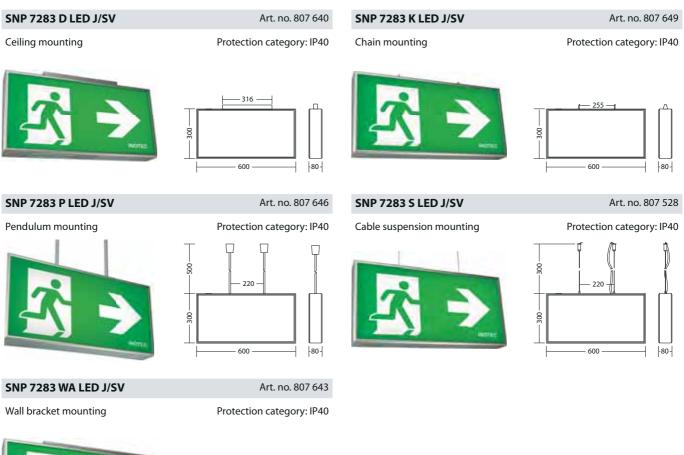
J/SV

Viewing distance:	60 m	Nominal current DC:	60 mA
Material:	Aluminium	Apparent power:	14,0 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	61 mA	Temperature ta:	-15+40 °C

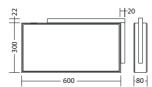
Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

#### Articles















Single sided aluminium profile emergency exit luminaires for recessed wall mounting. Invisible frame with an installation depth of 60mm. Homogeneous illumination by state-of-the-art LED technology with a luminance of > 500 cd/m<sup>2</sup>.

#### **Technical data**

Viewing distance:	32 m	Nominal current DC:	18 mA
Material:	Aluminium	Apparent power:	6,1 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	27 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

Special colour: L99 💋

#### Articles

#### SNP 7168.1 LED J/SV

Art. no. 807 272

Protection category: IP40

Recessed wall mounting



Sicherheitstechnik GmbH





## Four-sided emergency exit sign luminaires

Thanks to their adaptable pictogram cover, the INOTEC emergency exit sign luminaires with four-sided light emission can be used for a wide range of applications and adapted to the escape route directions on site.

In addition to ceiling mounting with cable entry from the back, the installation box also offers the possibility of inserting cables from the side when routing cables on wall plaster or using wire or chain mounting.

The luminaires are available for two different viewing distances.

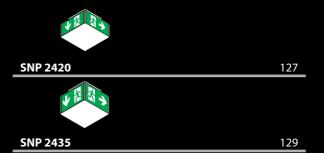
#### **Advantages**

- Reduced number of luminaires
- Easy assembly

#### Applications

- Storage areas
- Workplaces
- Shop premises













Four-sided emergency exit sign luminaire with anodized aluminium corner profile and multi-purpose installation box made of white UV- and filament resistant polycarbonate with optional side cable entry. Homogeneous pictogram illumination thanks to optimised LED technology with a luminance > 500 cd/m<sup>2</sup> and individually replaceable pictograms for each luminaire side.

#### **Technical data**

J/SV

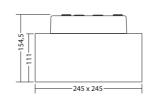
Viewing distance:	20 m	Apparent power:	4,4 VA
Material:	Polycarbonate	Effective power:	3,6 W
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	19 mA	Temperature ta:	-15+40 °C
Nominal current DC:	16 mA		

#### Articles

#### SNP 2420 LED J/SV

Ceiling mounting





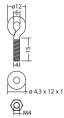
Art. no. 802 640

Protection category: IP54

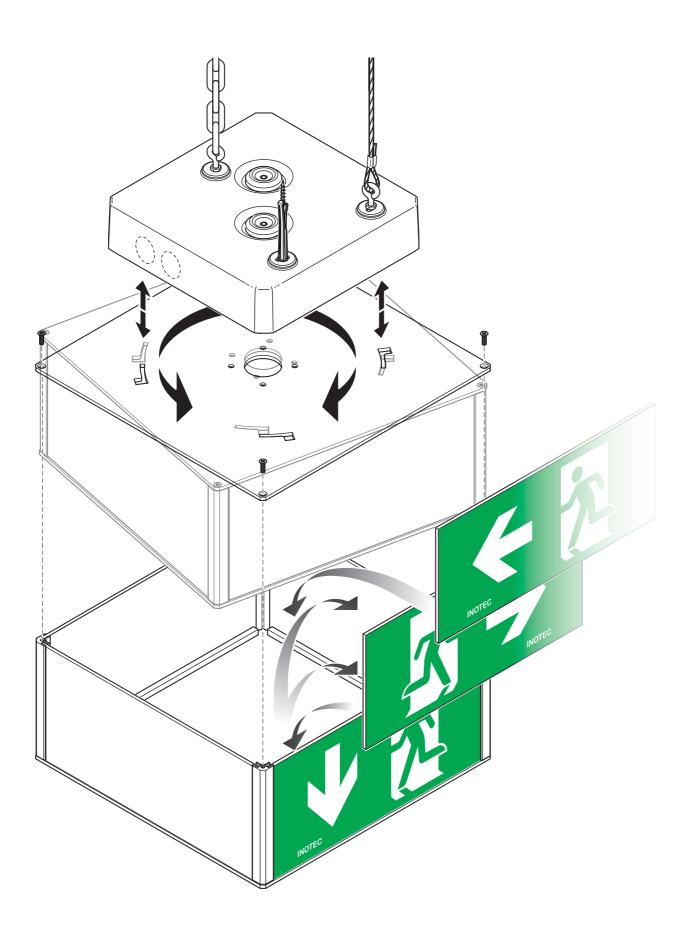
#### Ringbolts for SN 8500/24xx

optional accessories













Four-sided emergency exit sign luminaire with anodized aluminium corner profile and multi-purpose installation box made of white UV- and filament resistant polycarbonate with optional side cable entry. Homogeneous pictogram illumination thanks to optimised LED technology with a luminance > 500 cd/m<sup>2</sup> and individually replaceable pictograms for each luminaire side.

#### **Technical data**

Viewing distance:	35 m	Apparent power:	7,6 VA
Material:	Polycarbonate	Effective power:	5,7 W
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	33 mA	Temperature ta:	-15+40 °C
Nominal current DC:	25 mA		

#### Articles

#### SNP 2435 LED J/SV

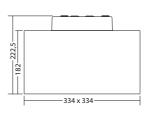
Protection category: IP54

Art. no. 802 642

#### Ringbolts for SN 8500/24xx

optional accessories













## Wall and step luminaires Safety and orientation luminaires

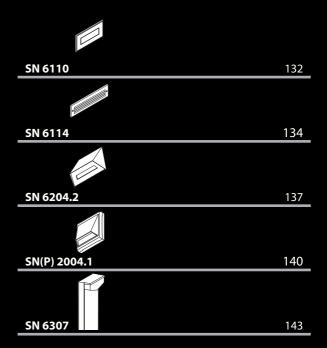
From top-quality LED step luminaires in stainless steel for the EN-compliant illumination of escape routes to luminaires with a high protection rating for emergency staircases (for instance): our range of wall and step luminaires contains something for every application.

#### **Advantages**

- Low power consumption
- Versatile mounting options
- Cutting-edge lighting technology

#### **Areas of application**

- Theatres
- Cinemas
- Staircases
- Lecture theatre
- etc.





#### SN 6110 Wall, floor and stair luminaires

J/SV For connection to JOKER-central battery systems



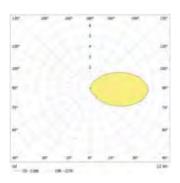


Rectangular LED safety luminaires to illuminate steps or escape routes. Recessed wall and stair mounting. Luminaire with powder-coated metal cover for installation in double wall box for concrete, cavity wall or in-wall.

#### **Technical data**

Material:	Sheet steel powder-coated
Illuminant:	LEDs
Luminous flux:	11 lm
Nominal voltage AC:	230V ±10% 50/60 Hz
Nominal voltage DC:	176 - 264 V
Nominal current AC:	27 mA

Nominal current DC:	18 mA
Apparent power:	6,1 VA
Inrush current:	8 A / 50 μs
Protection class:	I
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C



#### Articles

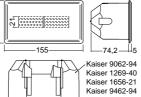
#### SN 6110 G LED J/SV rectangular, light output: grid Art. no. 806 014

8

Recessed wall or stair mounting

Protection category: IP20





230V SN 6110 Wall, floor and stair luminaires

J/SV For connection to JOKER-central battery systems

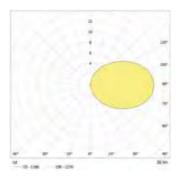




Rectangular LED safety luminaires to illuminate steps or escape routes. Recessed wall and stair mounting. Luminaire with powder-coated metal cover for installation in double wall box for concrete, cavity wall or in-wall.

#### **Technical data**

Material:	Sheet steel powder-coated	Nominal current DC:	18 mA
Illuminant:	LEDs	Apparent power:	6,1 VA
Luminous flux:	30 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	27 mA	Temperature ta:	-15+40 °C



Apparent power:	6,1 VA
Inrush current:	8 A / 50 μs
Protection class:	1
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C

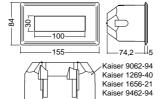
#### Articles

SN 6110 O LED J/SV rectangular, light out-Art. no. 806 011 put: opal

Recessed wall or stair mounting

Protection category: IP20





230V J/SV

## SN 6114 Wall, floor and stair luminaires

For connection to JOKER-central battery systems

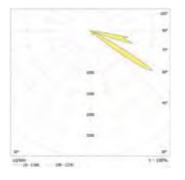




Robust LED safety luminaires to illuminate steps or escape routes. Recessed wall and stair mounting. Made of high-quality die-cast aluminium with high protection category.

#### **Technical data**

Material:	Die-cast aluminum	Nominal current DC:	25 mA
Illuminant:	LEDs	Apparent power:	7,1 VA
Luminous flux:	25 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	31 mA	Temperature ta:	-15+40 °C



Inrush current:	8 Α / 50 μs
Protection class:	I
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C

#### Articles

#### SN 6114 G LED J/SV grids

Recessed wall or stair mounting

Art. no. 806 025

Protection category: IP54

2 909 230V J/SV

## SN 6114 Wall, floor and stair luminaires

For connection to JOKER-central battery systems

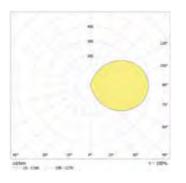




Robust LED safety luminaires to illuminate steps or escape routes. Recessed wall and stair mounting. Made of high-quality die-cast aluminium with high protection category.

#### **Technical data**

Material:	Die-cast aluminum	Nominal current DC:	25 mA
Illuminant:	LEDs	Apparent power:	7,1 VA
Luminous flux:	93 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	31 mA	Temperature ta:	-15+40 °C



Apparent power.	7,1 VA
Inrush current:	8 Α / 50 μs
Protection class:	I
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C

#### Articles

#### SN 6114 O LED J/SV

Recessed wall or stair mounting

Art. no. 806 024

Protection category: IP54



- 20 --



230V SN 6204.1 Wall, floor and stair luminaires

J/SV For connection to JOKER-central battery systems



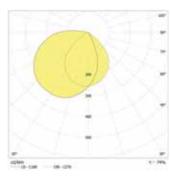
Trapezoidal LED emergency luminaires for illumination of escape routes and exit doors. Luminaires for wall mounting with elegant powder coated metal housing without any visible screws.





#### **Technical data**

Material:	Sheet steel powder-coated	Nominal current DC:	25 mA
Illuminant:	LEDs	Apparent power:	7,1 VA
Luminous flux:	210 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	31 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

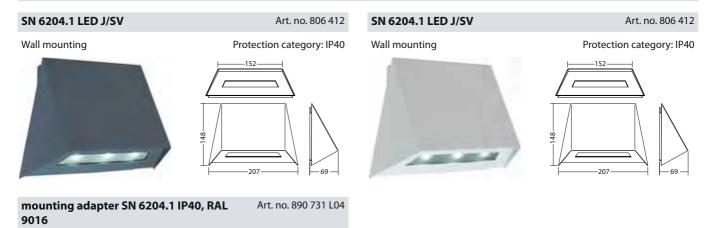
[m]			┣━		┣╼	
	Di	stance to	o middle	e of esca	pe rout	e
	1.0	m	2.0	Dm	3.0	)m
1.0	2.2	5.4	2.3	5.7	1.8	5.2
2.0	2.8	7.0	2.8	7.2	2.3	6.8
2.5	3.0	7.4	3.0	7.8	2.6	7.4
3.0	3.1	8.0	3.1	8.4	2.7	8.1
3.5	3.2	8.5	3.2	8.7	2.8	8.5
4.0	3.1	8.7	3.1	9.1	2.8	8.8
4.5	3.0	9.0	3.0	9.3	2.7	9.0
5.0	2.8	9.0	2.8	9.3	2.5	9.1
5.5	2.6	9.0	2.6	9.3	2.0	9.1
6.0	2.2	8.8	2.1	9.2	1.5	8.9

Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 🛛 RAL 7015 (Slate grey): L16 🔳

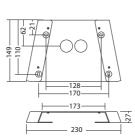
Special colour: L99 💋

Articles



optional accessories







1



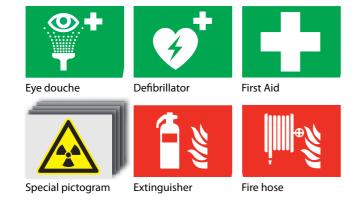


# Combined safety and safety sign luminaire

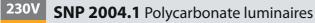
Fire fighting and first aid facilities have to be specially marked and illuminated by 5lux according to EN 1838 of October 2013. The direct surrounding (distance of min. 2 meter) has to be illuminated as well.

The new combined safety and safety sign luminaire SNP 2004.1 is the ideale luminaire to indicate and illuminate areas with fire fighting equipment, first aid stations and other important areas.

Compared to an illuminated sign, back-lit emergency signs have the benefit of a very good visibility in bright surroundings due to their luminance of > 500cd/m<sup>2</sup>. Fire fighting equipment and first aid facilities can be located very quickly in emergency situations. The integrated safety light will be switched on in case of a mains failure and illuminates the respective area according to the standards.









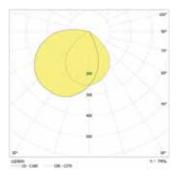


Versatile LED safety luminaire ideal for illumination of areas to be highlighted especially according to DIN EN 1838. Luminaire with separately switchable, backlit pictograph. UV resistant, heat filament tested polycarbonate housing for wall mounting with optional side cable entry.



#### **Technical data**

Viewing distance:	18 m	Nominal current DC:	43 mA
Material:	Polycarbonate	Apparent power:	13,2 VA
Illuminant:	LEDs	Inrush current:	6 A / 98 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	57 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	┝╼				⊢≘	
	Distance to middle of escape route				e	
	1.0			)m		)m
1.0	2.2	5.4	2.3	5.7	1.8	5.2
2.0	2.8	7.0	2.8	7.2	2.3	6.8
2.5	3.0	7.4	3.0	7.8	2.6	7.4
3.0	3.1	8.0	3.1	8.4	2.7	8.1
3.5	3.2	8.5	3.2	8.7	2.8	8.5
4.0	3.1	8.7	3.1	9.1	2.8	8.8
4.5	3.0	9.0	3.0	9.3	2.7	9.0
5.0	2.8	9.0	2.8	9.3	2.5	9.1
5.5	2.6	9.0	2.6	9.3	2.0	9.1
6.0	2.2	8.8	2.1	9.2	1.5	8.9

#### Articles

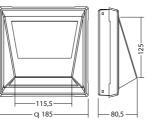
#### SNP 2004.1 LED J/SV

Wall mounting



Protection category: IP40

Art. no. 802 145 .1V



SN 2004.1 Polycarbonate luminaires

For connection to JOKER-central battery systems

INOTEC Sicherheitstechnik GmbH



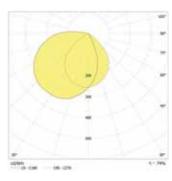
Versatile LED safety luminaire ideal for escape route or staircase illumination. UV resistant, heat filament tested polycarbonate housing for wall mounting with optional side cable entry.

#### **Technical data**

230V

J/SV

Material:	Polycarbonate	Nominal current DC:	25 mA
Illuminant:	LEDs	Apparent power:	7,1 VA
Luminous flux:	210 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	31 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	┣-■		┣╼			
	Di	Distance to middle of escape route			e	
	1.0m		2.0m		3.0m	
1.0	2.2	5.4	2.3	5.7	1.8	5.2
2.0	2.8	7.0	2.8	7.2	2.3	6.8
2.5	3.0	7.4	3.0	7.8	2.6	7.4
3.0	3.1	8.0	3.1	8.4	2.7	8.1
3.5	3.2	8.5	3.2	8.7	2.8	8.5
4.0	3.1	8.7	3.1	9.1	2.8	8.8
4.5	3.0	9.0	3.0	9.3	2.7	9.0
5.0	2.8	9.0	2.8	9.3	2.5	9.1
5.5	2.6	9.0	2.6	9.3	2.0	9.1
6.0	2.2	8.8	2.1	9.2	1.5	8.9

#### Articles

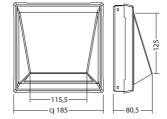
#### SN 2004.1 LED J/SV

Wall mounting



Art. no. 802 137 .1

#### Protection category: IP40





**SN 6307** Wall, floor and stair luminaires For connection to JOKER-central battery systems INOTEC Sicherheitstechnik GmbH



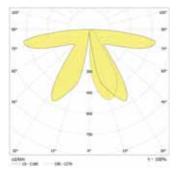
Elegant LED bollard luminaire ideal for outdoor escape route illumination made of powder-coated aluminium with high protection category.

#### **Technical data**

230V

J/SV

Material:	Aluminium powder-coated	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	178 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



#### Articles

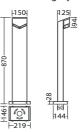
SN 6307 LED J/SV

Floor installation



Protection category: IP54

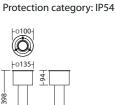
Art. no. 806 308



a optional accessories



ground element bollard console



Art. no. 040 821

www.inotec-licht.de 143







## Stainless steel luminaires Robust luminaire with high protection rating

INOTEC stainless steel luminaires are used wherever high degrees of protection and robust luminaire designs are required. The luminaires are available with fluorescent lamps or state-of-the-art LED technology.

#### Advantages

- Robust stainless steel housing A4 brushed
- Protection degree IP54 / IP65

#### **Applications**

- Food industry
- Work places with high demands
- Outdoor areas
- Carparks
- etc.

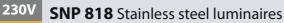


SNP 818	147
SNP 808	148
SNP 828	149
SN 804.1 WT	153
SN 804.1	155









For connection to JOKER-central battery systems





Single sided emergency exit luminaires made of robust, brushed stainless steel with high protection category. Homogeneous illumination by state-of-the-art LED technology with a luminance of >500cd/m<sup>2</sup>. Suitable for use in food industry or food processing plants with high demands on product hygiene.

#### **Technical data**

J/SV

Viewing distance:	17 m	Nominal current DC:	18 mA
Material:	Stainless steel brushed	Apparent power:	6,1 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	27 mA	Temperature ta:	-15+40 °C
Available colours Add colour code to the article no. e.g. 800 014 LXX			

stainless steel: L30 Special colour: L99 💋

#### Articles

#### SNP 818 LED J/SV

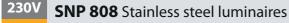
Wall mounting



110⊥				-72-
	•		•	
		340		

Art. no. 808 818

Protection category: IP54



J/SV For connection to JOKER-central battery systems



Single sided emergency exit luminaires made of robust, brushed stainless steel with high protection category. Homogeneous illumination by state-of-the-art LED technology with a luminance of >500cd/m<sup>2</sup>. Suitable for use in food industry or food processing plants with high demands on product hygiene.





#### **Technical data**

Viewing distance:	30 m	Nominal current DC:	18 mA
Material:	Stainless steel brushed	Apparent power:	6,1 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	27 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

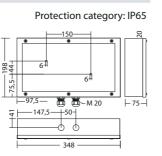
stainless steel: L30 Special colour: L99 💋

#### Articles

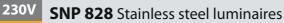
#### SNP 808 LED J/SV

Wall mounting





Art. no. 808 817



For connection to JOKER-central battery systems



Double-sided emergency exit luminaires made of robust, brushed stainless steel with high protection category. Homogeneous illumination by state-of-theart LED technology with a luminance of >500cd/m<sup>2</sup>. Suitable for use in food industry or food processing plants with high demands on product hygiene.





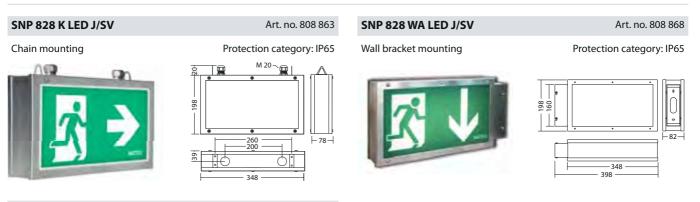
#### **Technical data**

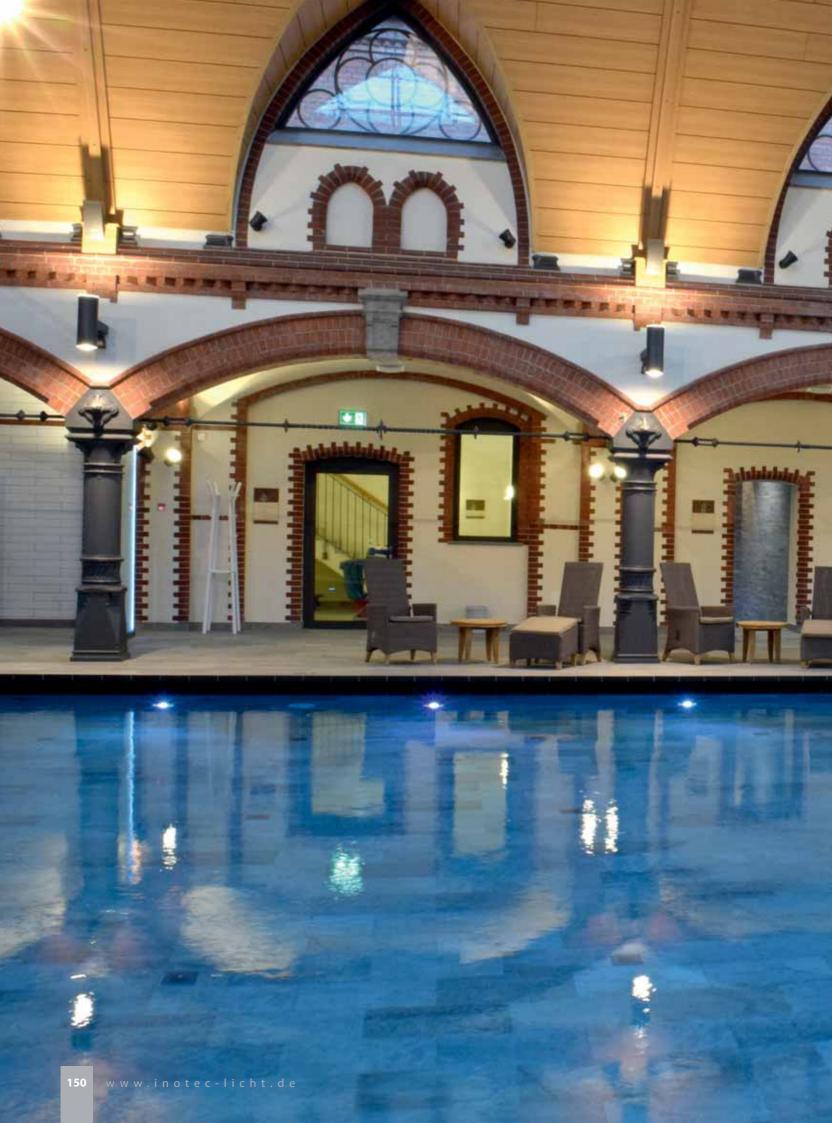
J/SV

Viewing distance:	30 m	Nominal current DC:	32 mA
Material:	Stainless steel brushed	Apparent power:	8,3 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C

Available colours Add colour code to the article no. e.g. 800 014 LXX

stainless steel: L30 Special colour: L99 💋









### Standard-compliant safety lighting up to the safe area





Safety lighting outside buildings up to a safe area, as required by EN 1838, is often difficult to provide. The supply of general lighting in outdoor areas or mast luminaires with high output is related to a bigger system as well as a higher battery capacity and therefore is very costly.

The new bollard luminaire SN 6307 is the ideal luminaire to illuminate outdoor areas due to its low power consumption and the high degree of protection IP54. The optimised light technology allows distances between two luminaires of more than 10m.

The new safety luminaire SN 804.1 WT is an alternative if it's not possible to use a bollard luminaire due to the structural design of a building. This luminaire illuminates the escape route with 1 lux at mounting heights of up to 32m. This means that the luminaire can be mounted unobtrusively at high altitudes. The practical, lockable mounting bracket can be used for adjusting the luminaire to the corresponding escape area.



#### 230V SN 804.1 WT Stainless steel luminaires

J/SV For connection to JOKER-central battery systems



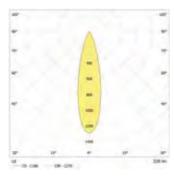


Robust stainless steel luminaires for illuminating surfaces and escape routes. Luminaire made of brushed stainless steel with high protection class and special low beam optics for suspension heights up to 32m.



#### **Technical data**

Material:	Stainless steel brushed	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	339 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	<b>⊢</b> ⊙	0-0
11.0	4.6	11.1
12.0	4.7	11.5
14.0	4.9	12.5
16.0	5.0	13.2
18.0	5.0	13.7
20.0	5.0	14.0
22.0	4.9	14.2
24.0	4.6	14.3
26.0	4.2	14.3
28.0	3.7	14.1
30.0	2.9	14.1
32.0	0.9	13.6

Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8

	P	0-0 0-0
11.0	3.3	9.0
12.0	3.6	9.5
14.0	3.7	10.3
16.0	3.7	11.1
18.0	3.7	11.8
20.0	3.7	12.2
22.0	3.6	12.7
24.0	3.6	12.8
26.0	3.5	12.8
28.0	3.2	12.4
30.0	3.0	12.2
32.0	2.8	12.1

Available colours Add colour code to the article no. e.g. 800 014 LXX

stainless steel: L30 Special colour: L99 💋

#### Articles

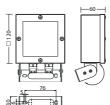
#### SN 804.1 W T LED J/SV

Wall bracket mounting



Protection category: IP65







**SN 804.1** Stainless steel luminaires

For connection to JOKER-central battery systems





Robust brushed stainless steel luminaires with high protection category and latest LED-technology for area or escape route illumination. Suitable for use in food industry or food processing plants with high demands on product hygiene.

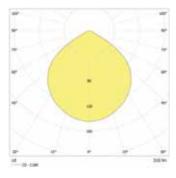


#### **Technical data**

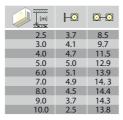
230V

J/SV

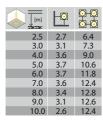
Material:	Stainless steel brushed	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	310 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

stainless steel: L30 📃 🛛 Special colour: L99 💋

#### Articles

#### SN 804.1 AP LED J/SV

ceiling mounting for exposed wiring



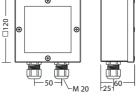
#### SN 804.1 E LED J/SV

Recessed ceiling mounting



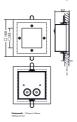
Protection category: IP65

Art. no. 808 471



Art. no. 808 461

#### Protection category: IP65





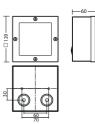
#### SN 804.1 W LED J/SV

#### Wall bracket mounting



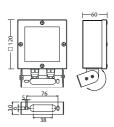


#### Protection category: IP65



Art. no. 808 441

#### Protection category: IP65







## Downlights Powerful and versatile

INOTEC offers a wide range of downlights. Versatile mounting and fastening options offer the ideal solution for every application.

#### Advantages

- Low power consumption
- Easy installation
- State-of-the-art lighting technology

#### Applications

- Public buildings
- Workplaces
- High-bay warehouses
- Conference facilities
- Hotels
- Office buildings
- Shop premises
- etc.

SN 9100 TES	159
SN 9400	165
SN 8400	171
SN 8500	185
SN 8040	191
SN 2040.1	195

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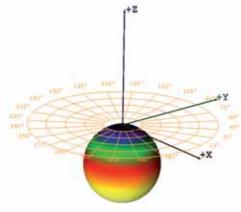


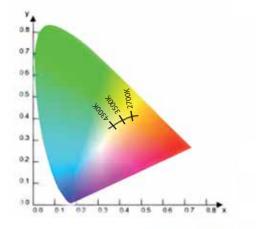
## High-quality aluminium recessed downlight with INOTEC TES technology

The elegant and compact recessed downlight SN 9100 made of high-quality aluminium can be discreetly and unobtrusively integrated into almost any ceiling mirror.

The new INOTEC TES technology (Translucent-Emitting-Surface) ensures 20% higher luminous efficiency at the same power consumption compared to conventional warm-white power LEDs. A backlit, light-emitting disc produces a rotationally symmetrical and uniform radiation characteristic.

The SN 9100 is optionally available in three different light colours (2700K, 3500K and 4300K) and is not only suitable as a safety luminaire, but also fulfils all requirements for convenient passage lighting.









SN 9100 TES Downlights

For connection to JOKER-central battery systems





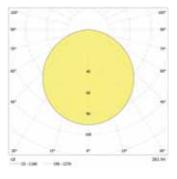
High-quality LED downlight, ideal for area or escape route illumination. Perfect for combined usage of safety and general lighting. Possible adaption to the light colour of the general lighting by Translucent-Emitting-Surface (TES) technology. Powder-coated aluminium housing without any visible screws designed for tool-less recessed ceiling installation in a ceiling cut-out Ø 72mm.

#### **Technical data**

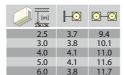
230V

J/SV

Material:	Aluminium powder-coated	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	261 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 🛛 Special colour: L99 💋

#### Articles

SN 9100 LED J/SV	round	Art. no. 809 001	SN 9100 LED J/SV	round	Art. no. 809 002
Recessed ceiling mounting	Light colour: 270	0 K Protection category: IP20	Recessed ceiling mounting	Light colour: 3	3500 K Protection category: IP20
		260 280 280 280 280 280 257 256			34,55 14,55 14,55 14,55 14,55 14,55 14,55 14,55 14,55 14,55 14,55
SN 9100 LED J/SV	round	Art. no. 809 003	LED-Supply 230-3	J-SV SK II ext.	Art. no. 890 490
Recessed ceiling mounting	Light colour: 430	0 K Protection category: IP20	required		
			( Sult	10	

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INOTEC





## New downlight series for greater safety and efficiency

The housings of the new INOTEC downlight series are made from highquality powder-coated die-cast aluminium.

The discreet design allows the LED emergency luminaires to be unobtrusively integrated into the architecture of the building.

A highly efficient power LED of the latest generation combined with excellent thermal management ensures a luminous flux of more than 160 Im/W.

In addition, the multi-chip LED used offers a higher level of safety. With INOTEC FUSION CPS and CLS emergency lighting systems, even the failure of a single chip can be detected.

Thanks to different secondary optics, the luminous flux of the LED is used optimally.

Thus escape routes or areas with various mounting heights are illuminated efficiently.

Particular focus was placed on practice-oriented spacings between safety luminaires at the lowest possible power consumption.





#### **ALB - Asymmetric Low Bay**

Luminaires with asymmetrical light distribution ALB are particularly suitable for escape routes with low mounting heights.

The light distribution is designed to illuminate escape routes efficiently and in compliance with regulations.



#### **AHB - Asymmetric High Bay**

Luminaires with asymmetrical light distribution AHB are particularly suitable for escape routes with high mounting heights.

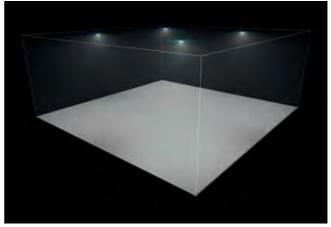
The light distribution is designed to illuminate escape routes efficiently and in compliance with regulations.



#### **SLB - Symmetric Low Bay**

Luminaires with symmetrical light distribution SLB are particularly suitable for escape routes with low mounting heights.

The light distribution is designed to illuminate escape routes efficiently and in compliance with regulations.



#### SHB - Symmetric High Bay

Luminaires with symmetrical light distribution SHB are particularly suitable for escape routes with high mounting heights.

The light distribution is designed to illuminate escape routes efficiently and in compliance with regulations.

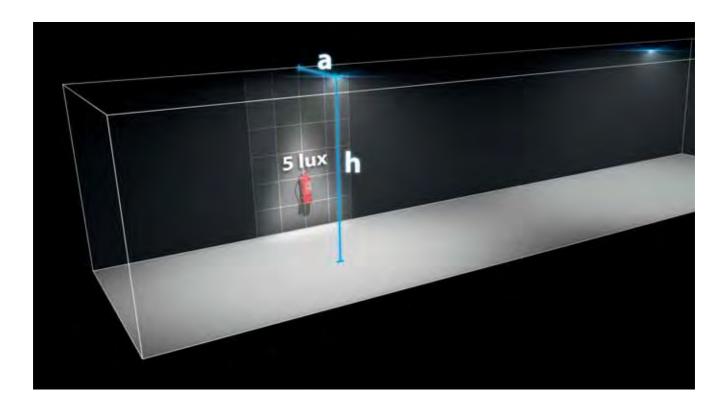


## Illuminate places to be highlighted in accordance to the standards

EN 1838 requires safety lighting in places to be highlighted. A higher lighting level is specified for first-aid stations, fire-fighting and alarm equipment.

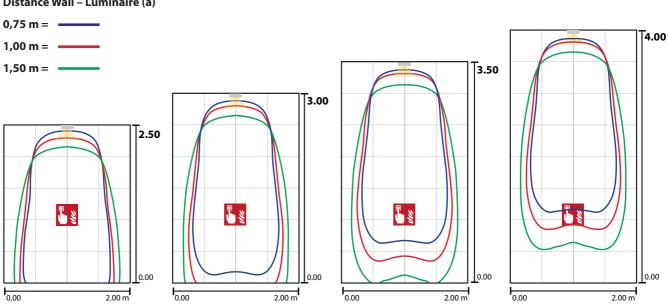
In order to provide adequate visual conditions in the event of a power failure, the vertical illuminance at these devices has to be 5lx.





#### AHB –for 5lx in places to be highlighted

The luminaires with asymmetrical light distribution for high mounting heights AHB can be mounted crosswise to the escape route and used as safety luminaires for places to be highlighted with an illuminance of 5 lx.



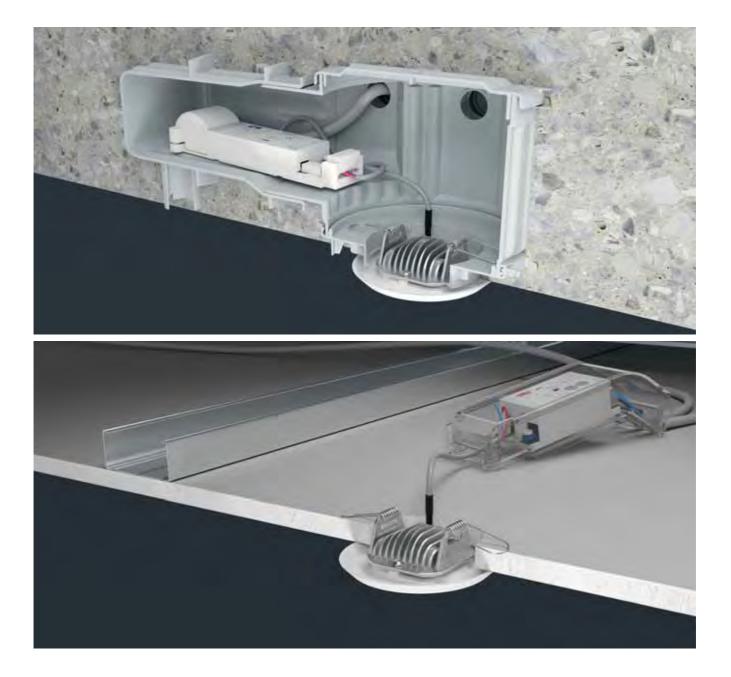
Distance Wall – Luminaire (a)



### Versatile installation

The SN 9400 luminaire series can be mounted quickly and easily in suspended ceilings using the proven mounting springs. The heatsink has been particularly engineered to ensure efficient heat dissipation and thus a long service life of the LEDs.

The SN 9400 is also suitable for installation in the HaloX-O concrete housing with Kaiser transformer tunnel. In this way, these safety luminaires can be installed in concrete ceilings that have been constructed using the in-situ concrete method or in factory production.



SN 9400-12 SLB Downlights

For connection to JOKER-central battery systems





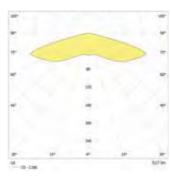
LED safety luminaire with optimised light distribution for the illumination of spaces. Housing made of powder-coated aluminium for installation in Ø 68mm ceiling cutout. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

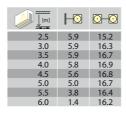
230V

J/SV

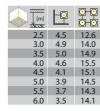
Material:	Die-cast aluminum powder-coated	Apparent power:	7,6 VA
Illuminant:	LEDs	Effective power:	5,7 W
Luminous flux:	517 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	33 mA	Temperature ta:	-15+40 °C
Nominal current DC:	25 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



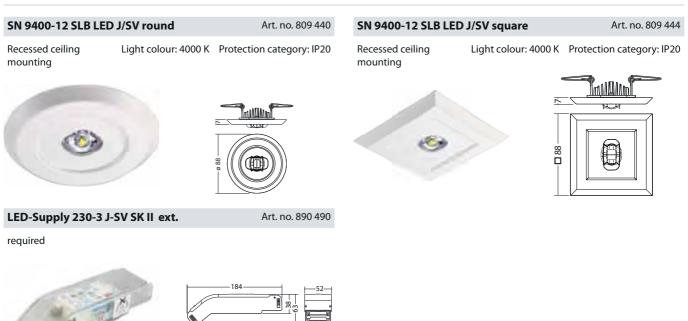
Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

INOTEC

RAL 9016 (Traffic white): L04 📃 🛛 Special colour: L99 💋





J/SV For connection to JOKER-central battery systems

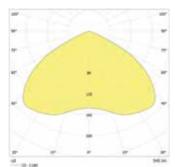




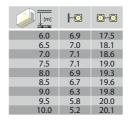
LED safety luminaire with optimised light distribution for the illumination of spaces with high mounting heights. Housing made of powder-coated aluminium for installation in Ø 68mm ceiling cutout. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

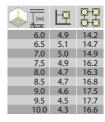
Material:	Die-cast aluminum powder-coated	Apparent power:	7,6 VA
Illuminant:	LEDs	Effective power:	5,7 W
Luminous flux:	545 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	33 mA	Temperature ta:	-15+40 °C
Nominal current DC:	25 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 Special colour: L99 💋

#### Articles



INOTEC

230V SN 9400-03 ALB Downlights

For connection to JOKER-central battery systems



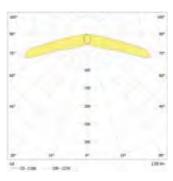


LED safety luminaire with optimised light distribution for the illumination of escape routes. Housing made of powder-coated aluminium for installation in Ø 68mm ceiling cutout. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

J/SV

Material:	Die-cast aluminum powder-coated	Apparent power:	3,5 VA
Illuminant:	LEDs	Effective power:	2,6 W
Luminous flux:	139 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	15 mA	Temperature ta:	-15+40 °C
Nominal current DC:	12 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	He	00		
2.5	6.8	17.0	5.3	1.9
3.0	5.3	18.1	5.4	1.8
3.5	4.8	17.9	5.4	1.6
4.0	3.8	17.3	5.3	1.3
4 5	3.0	143	5.0	0.9

Available colours Add colour code to the article no. e.g. 800 014 LXX

INOTEC

RAL 9016 (Traffic white): L04 📃 🛛 Special colour: L99 💋





J/SV For connection to JOKER-central battery systems



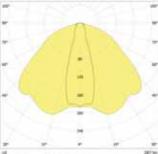
LED safety luminaire with optimised light distribution for the illumination of escape routes with high mounting heights. Also suitable for illumination of firefighting and fire alarm systems as well as first aid stations with 5 lx vertical illuminance.Housing made of powder-coated aluminium for installation in Ø 68mm ceiling cutout. Incl. 4-chip LED illuminant for maximum safety.





#### **Technical data**

Material:	Die-cast aluminum powder-coated	Apparent power:	4,4 VA
Illuminant:	LEDs	Effective power:	3,6 W
Luminous flux:	287 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	19 mA	Temperature ta:	-15+40 °C
Nominal current DC:	16 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	He	88	๎๎๎ <b>๗</b> – <b>๗</b>	ŒH
5.0	6.5	16.0	5.8	1.9
6.0	7.0	17.2	5.2	2.1
7.0	7.3	18.4	5.5	2.3
8.0	7.3	19.5	5.8	2.4
9.0	6.8	20.3	6.2	2.4
10.0	6.0	20.7	6.5	2.4
11.0	5.4	20.7	6.7	2.2
12.0	4.2	20.0	6.8	0.7

- ID-128 - 196-129

#### Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 Special colour: L99 💋

#### Articles



INOTEC

SN 9400-03 SLB Downlights

For connection to JOKER-central battery systems





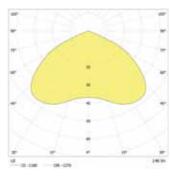
LED safety luminaire with optimised light distribution for the illumination of small areas such as lavatories or electrical operating rooms with a luminaire. Housing made of powder-coated aluminium for installation in Ø 68mm ceiling cutout. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

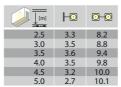
230V

J/SV

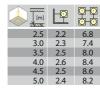
Material:	Die-cast aluminum powder-coated	Apparent power:	3,5 VA
Illuminant:	LEDs	Effective power:	2,6 W
Luminous flux:	146 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	15 mA	Temperature ta:	-15+40 °C
Nominal current DC:	12 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

INOTEC

RAL 9016 (Traffic white): L04 📃 🛛 Special colour: L99 💋





## Optional side cable entry for surfacemounted installations

The SN 8400 emergency luminaires are available in roand and square versions. Therefore, they can be harmoniously integrated into the existing architecture.

The housing offers the possibility of side cable entry without additional accessories. The side entries are not visible at standard surface mounting, but can be opened easily if needed.



SN 8400-12 SLB Downlights

For connection to JOKER-central battery systems





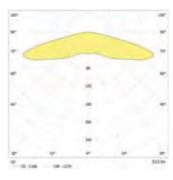
LED safety luminaire with optimised light distribution for the illumination of spaces. Housing made of powder-coated aluminium for ceiling mounting with optional cable entry at the side. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

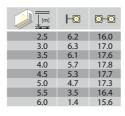
230V

J/SV

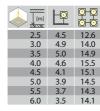
Material:	Die-cast aluminum powder-coated	Apparent power:	7
Illuminant:	LEDs	Effective power:	5
Luminous flux:	513 lm	Inrush current:	8
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2
Nominal current AC:	33 mA	Temperature ta:	-
Nominal current DC:	25 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 Special colour: L99 💋





J/SV For connection to JOKER-central battery systems

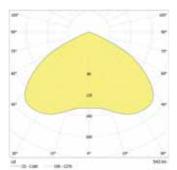




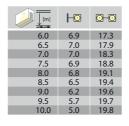
LED safety luminaire with optimised light distribution for the illumination of spaces with high mounting heights. Housing made of powder-coated aluminium for ceiling mounting with optional cable entry at the side. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

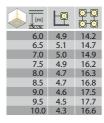
Material:	Die-cast aluminum powder-coated	Apparent power:	7,6 VA
Illuminant:	LEDs	Effective power:	5,7 W
Luminous flux:	543 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	33 mA	Temperature ta:	-15+40 °C
Nominal current DC:	25 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 Special colour: L99 💋



SN 8400-03 ALB Downlights

For connection to JOKER-central battery systems





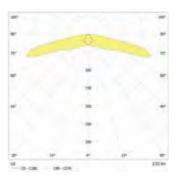
LED safety luminaire with optimised light distribution for the illumination of escape routes. Housing made of powder-coated aluminium for ceiling mounting with optional cable entry at the side. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

230V

J/SV

Material:	Die-cast aluminum powder-coated	Apparent power:	3,5 VA
Illuminant:	LEDs	Effective power:	2,6 W
Luminous flux:	133 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	15 mA	Temperature ta:	-15+40 °C
Nominal current DC:	12 mA		

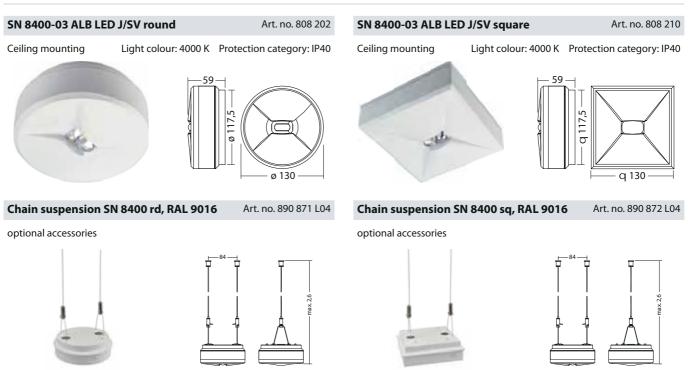


Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	HO		0 0	
2.5	6.7	16.9	4.7	1.9
3.0	5.3	18.1	5.1	2.0
3.5	4.9	17.8	5.5	1.8
4.0	3.9	16.6	5.6	1.5
45	3.1	144	55	11

Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 🦳 Special colour: L99 💋





J/SV For connection to JOKER-central battery systems



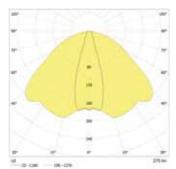
LED safety luminaire with optimised light distribution for the illumination of escape routes with high mounting heights. Also suitable for illumination of firefighting and fire alarm systems as well as first aid stations with 5 lx vertical illuminance. Housing made of powder-coated aluminium for ceiling mounting with optional cable entry at the side. Incl. 4-chip LED illuminant for maximum safety.





#### **Technical data**

Material:	Die-cast aluminum powder-coated	Apparent power:	4,4 VA
Illuminant:	LEDs	Effective power:	3,6 W
Luminous flux:	275 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	19 mA	Temperature ta:	-15+40 °C
Nominal current DC:	16 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	He	88		
5.0	6.6	16.0	5.0	1.9
6.0	7.2	17.4	4.9	2.1
7.0	7.5	18.7	5.4	2.3
8.0	7.4	19.9	5.7	2.4
9.0	6.6	20.7	6.2	2.4
10.0	5.9	21.1	6.5	2.3
11.0	49	20.9	6.7	21

Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 Special colour: L99 💋



SN 8400-03 SLB Downlights

For connection to JOKER-central battery systems





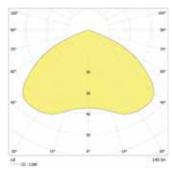
LED safety luminaire with optimised light distribution for the illumination of small areas such as lavatories or electrical operating rooms with a luminaire. Housing made of powder-coated aluminium for ceiling mounting with optional cable entry at the side. Incl. 4-chip LED illuminant for maximum safety.

#### **Technical data**

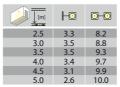
230V

J/SV

Material:	Die-cast aluminum powder-coated	Apparent power:	3,5 VA
Illuminant:	LEDs	Effective power:	2,6 W
Luminous flux:	145 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	15 mA	Temperature ta:	-15+40 °C
Nominal current DC:	12 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 🦳 Special colour: L99 💋



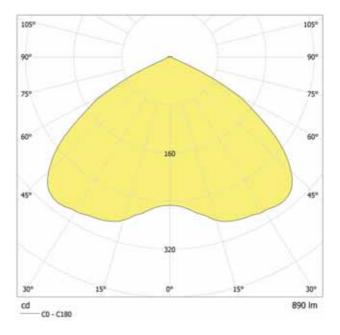


### Performance-optimised illumination of large areas

The SN 8500-08 SHB is ideal for illuminating large areas with an illuminance of one lux.

Secondary optics with rotationally symmetrical light distribution enable effective and homogeneous illumination.

The highly efficient LED illuminant with a luminous flux of more than 160lm/W ensures significant luminaire spacing between luminaires for large mounting heights.







The robust powder-coated die-cast aluminium housing of the SN 8500 is ideally suited for use in industry. The luminaire is protected against the ingress of water and dust by the high protection degree of IP65.

In addition to the cable entries from behind, the housing also offers the option of inserting cable glands laterally into the housing. For this purpose, two pre-embossed openings can simply be removed on each of the three sides.

Optional accessories allow the luminaire to be mounted flexibly. The SN 8500 can be suspended on chains, mounted on the wall with a lockable wall bracket or installed in the ceiling with a mounting frame.



# Safety lighting for workplaces with special hazards

Due to the increased risk of accidents in the event of a power failure, EN 1838 requires an increased lighting level for workplaces with special hazards.

In these areas, the illuminance in emergency operation shall be at least 10 % of the illuminance required for the task. However, at no point shall the illuminance drop below 15 lx.



#### **Tip for installation**

For high ceilings, e.g. in industrial halls, the SN 8500 can be suspended with optional chain hooks above the area that needs to be illuminated.



Examples of work areas with special hazards according to ASR A3.4/7:

#### Iaboratories

if it is necessary for employees to stop or interrupt an ongoing test in order to prevent acute danger to employees and third parties. Such serious hazards may include explosions or fires and the release of pathogens or of toxic, very toxic or radioactive substances in hazardous quantities

#### workplaces

which must be kept dark for technical reasons

electrical operating rooms and rooms for technical installations

which must be entered in the event of failure of artificial lighting

#### the immediate area of long-lasting work equipment

with moving parts which could not be protected and which can cause accident hazards, e.g. facing lathes, as far as additional accident hazards are caused by light failure

#### Control devices for permanently monitored systems

e.g. control rooms and control stations for power plants, chemical and metallurgical plants as well as workplaces at locking and control equipment which must be operated during operation or in the event of malfunctions to avoid the risk of accidents in order to interrupt or terminate production processes safely

#### workstations near hot baths or casting pits

which cannot be secured by railings or barriers for technical production reasons

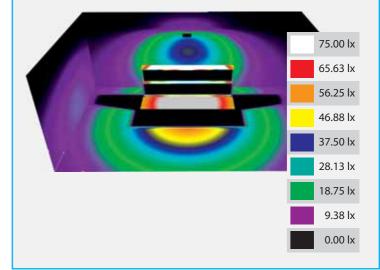
- areas aroand working pits which cannot be covered for operational reasons.
- workstations on construction sites

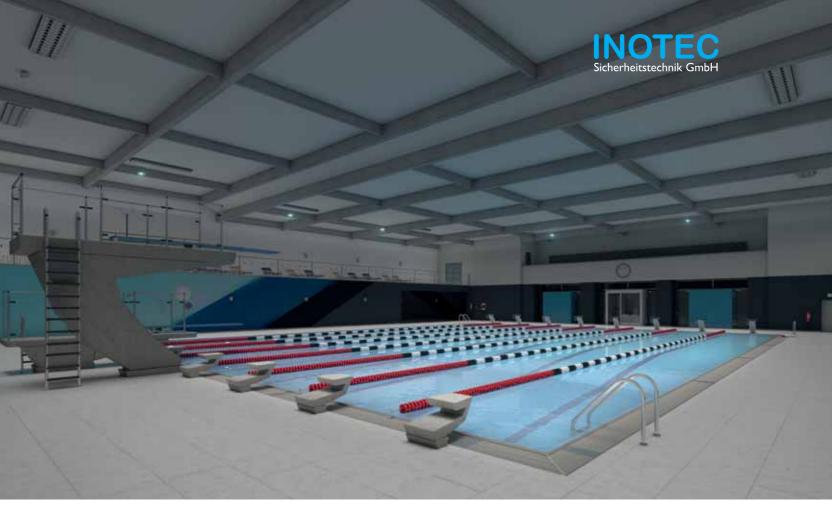
### **Case study**

Work area:	Laboratory
Mounting:	ceiling mounting: (4m height)
Work surface:	4m x 1m
Required illumi- nance:	E <sub>m</sub> : 75lx (10% of general lighting) E <sub>min</sub> : 15lx
Uniformity:	1:10 (> 0,1)
Luminaire:	1 x SN 8500-25

In this example, a SN 8500-25 luminaire can be used to achieve the required average illuminance of 75lx within a 4m x1m working area. The uniformity (Emin/Emax) is 0.3.







## Lighting requirements for swimming pools

The KOK Directive on the Construction of Swimming Pools (2013) requires for swimming pools with a water depth of 1.35 metres or more, to have an illuminance of up to 15 lux on the water surface.

If there is a risk of accidents due to failure of the general lighting, the 107-001 "Operation of baths" rule of the German statutory accident insurance (DGUV) requires safety lighting with an illuminance of one percent of the general lighting, but at least one lux.

#### Mounting

The KOK guideline recommends that luminaires should not be installed above the water surface, but parallel to the swimming pool. This also makes maintenance much easier. The optionally available lockable mounting bracket of the SN 8500 allows precise illumination of the water surface. This means that even areas that are difficult to illuminate can be illuminated in accordance with standards.

#### Housing

The SN 8500 luminaire series consists of highquality, corrosion-resistant die-cast aluminium. The powder-coated housing is also highly resistant to chlorine. The IP65 degree of protection makes these luminaires ideal for use in swimming pools.

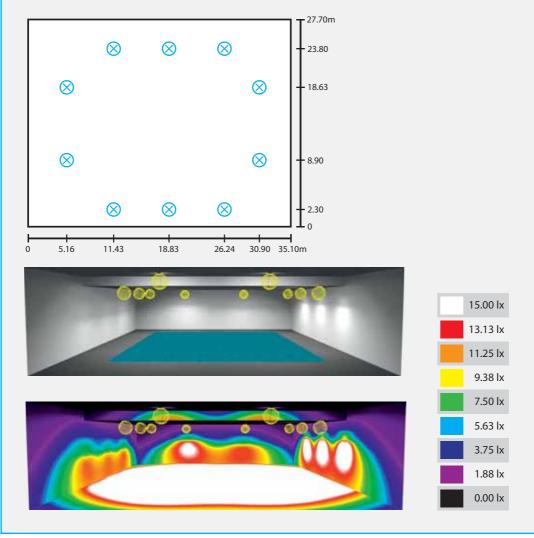




## **Case study**

Project:	swimming pool
Mounting:	ceiling mounting (7m height)
Pool size:	26m x 20m
Required illuminance on the water surface:	Emin: 15lx
Luminaire:	10 x SN 8500-25

In this project example ten SN 8500-25 are used to illuminate the water surface with at least 15lx. The inclination can be selected with the optional mounting bracket so that the luminaires do not have to be mounted above the water surface.





# Safety lighting for sports facilities in accordance with EN 12193

If a power failure occurs during a sporting event, it can quickly become dangerous for participants due to the lack of lighting. EN 12193 therefore requires a higher level of safety lighting for selected sporting categories than that specified in EN 1838. Depending on the type of sport, a certain percentage of the specified mean illuminance must be achieved for a period of between 30 and 120 seconds. At the end of this period, the requirements of EN 1838 apply.

The average illuminance levels depend on the competition level and the sports practised. The competition level is divided into different lighting classes.

Competitive level	Illumination classes			
	L I	Ш	II.	
International / National	*			
Regional	*	*		
Local	*	*	*	
Training		*	*	
School sports / leisure sports			*	



Indoor facilities				
		Class I	Class II	Class III
Sports	Duration	E <sub>m</sub>	E <sub>m</sub>	E <sub>m</sub>
Swimming	30s	25 lx	15 lx	10 lx
Gymnastics	30s	25 lx	15 lx	10 lx
Horse Riding	120s	25 lx	15 lx	10 lx
Speed skating	30s	25 lx	15 lx	10 lx
Cycling	60s	75 lx	50 lx	20 lx

EN 12193 defines the following values for the various lighting classes:

\* In contrast to the minimum illuminance usually used in emergency lighting, this is a medium illuminance level

\*\* The stated values are maintenance values.

\*\*\* Uniformity (Emin/ Em) for emergency operation during the specified period is not specified in EN 12193. In order to ensure sufficient visual conditions, we recommend a uniformity of 50% of the value prescribed for the competition.

## Impact resistant acc. to VDE 0710-13

The ball-proof and impact-resistant housing (IK10) can also be easily integrated into suspended hall ceilings with an installation frame.





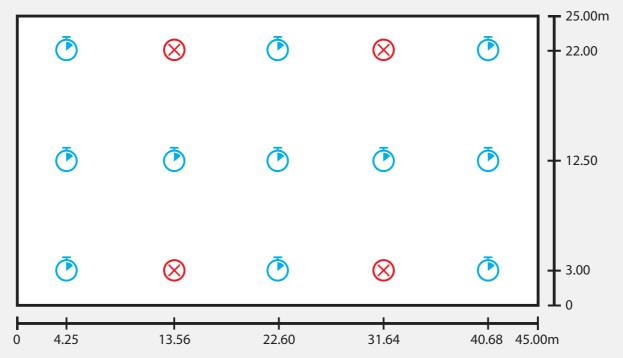


## **Case study**

Type of sport:	Gymnastics (lighting class I)
Mounting:	Ceiling mounting (12m height)
Playing field	45m x 25m
Required illuminance in emergency mode for the first 30 seconds:	Em: 25lx g: 0,35 (Emin/Em)
Required illuminance in emergency mode after 30 seconds:	Emin: 1lx g: 0,025 (Emin/Emax)
Luminaire:	15 x SN 8500-25

In this example, 15 SN 8500-25 luminaires can be used to achieve the required average illuminance of 25lx on a 45m x 25m playing field. The uniformity (Emin/Em) is 0.6.

With INOTEC FUSION emergency lighting units, it is also possible to switch off individual luminaires after a defined time in DC mode. This significantly reduces the battery capacity.



The corresponding luminaires are programmed in the controller or in the configurator.

This means that 11 emergency luminaires (blue) of the total of 15 luminaires can be switched off after 30 seconds. The four other luminaires (red) are sufficient to illuminate the entire sports hall with at least 1 lx.

230V SN 8500-25 Downlights

For connection to JOKER-central battery systems





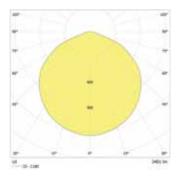
Downlight for enhanced lighting requirements. For illuminating workplaces with special risks, swimming pools or sports facilities. Robust housing made of diecast aluminium with optional lateral cable gland.



#### **Technical data**

J/SV

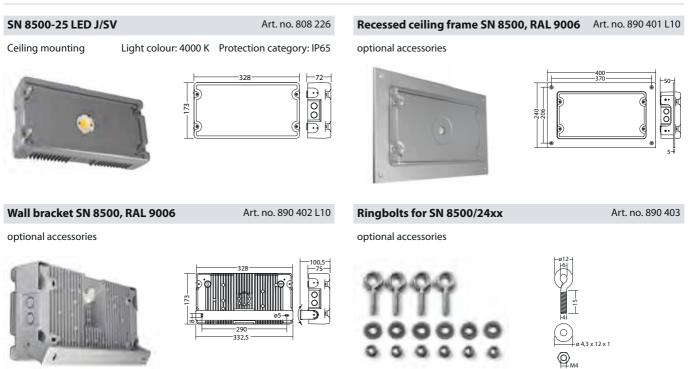
Material:	Die-cast aluminum	Apparent power:	30,9 VA
Illuminant:	LEDs	Effective power:	29,8 W
Luminous flux:	3401 lm	inrush current:	11 A / 264 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	134 mA	Temperature ta:	-15+40 °C
Nominal current DC:	135 mA	Impact resistance:	IK10

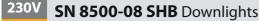


Effective power:	29,8 W
inrush current:	11 A / 264 μs
Protection class:	1
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C
Impact resistance:	IK10

Add colour code to the article no. e.g. 800 014 LXX **Available colours** 

RAL 9006 (White aluminium): L10 Special colour: L99 💋





J/SV For connection to JOKER-central battery systems



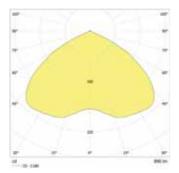


Downlight for enhanced lighting requirements. For illuminating large areas with high mounting heights. Robust housing made of die-cast aluminium with optional lateral cable gland.

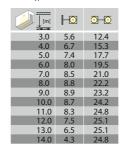


#### **Technical data**

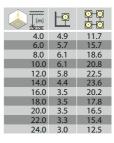
Material:	Die-cast aluminum	Apparent power:	12,5 VA
Illuminant:	LEDs	Effective power:	10,9 W
Luminous flux:	890 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	54 mA	Temperature ta:	-15+40 °C
Nominal current DC:	49 mA	Impact resistance:	IK10



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



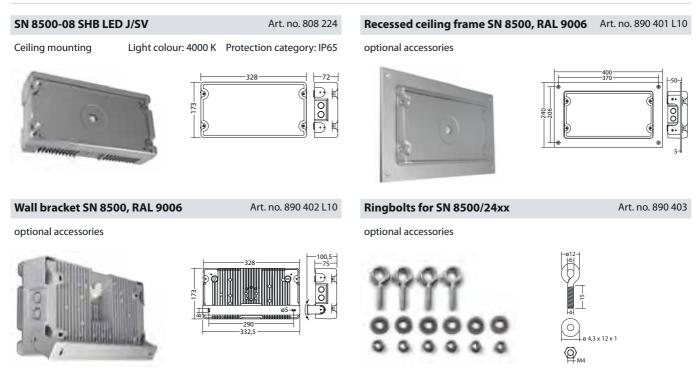
Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9006 (White aluminium): L10

0 Special colour: L99 💋



230V SN 8500-12 Downlights

For connection to JOKER-central battery systems





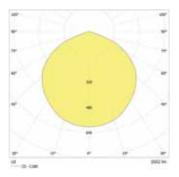
Downlight for enhanced lighting requirements. For illuminating workplaces with special risks, swimming pools or sports facilities. Robust housing made of diecast aluminium with optional lateral cable gland.



#### **Technical data**

J/SV

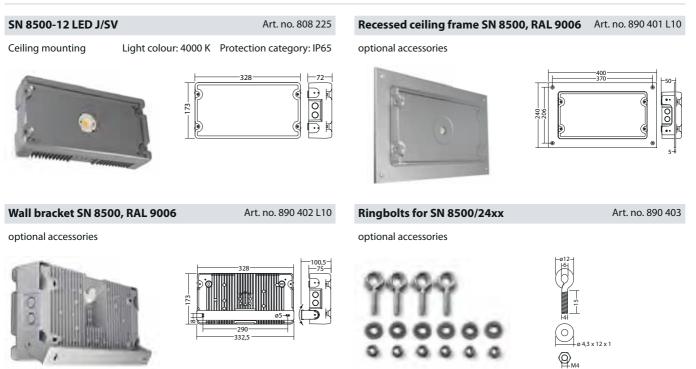
Material:	Die-cast aluminum	Apparent power:	19.4 VA
Material.	Die-cast aluminum	Apparent power:	19,4 VA
Illuminant:	LEDs	Effective power:	17,9 W
Luminous flux:	1652 lm	inrush current:	11 A / 264 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	84 mA	Temperature ta:	-15+40 °C
Nominal current DC:	80 mA	Impact resistance:	IK10



Apparent power.	10,107
Effective power:	17,9 W
inrush current:	11 A / 264 μs
Protection class:	I
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C
Impact resistance:	IK10

Add colour code to the article no. e.g. 800 014 LXX **Available colours** 

RAL 9006 (White aluminium): L10 Special colour: L99 💋





230V

J/SV

### SN 8500-25 T/S Downlights

for connection to JOKER-central battery systems



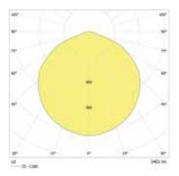




Downlight for enhanced lighting requirements. For illuminating workplaces with special risks, swimming pools or sports facilities. Robust housing made of diecast aluminium with optional lateral cable gland. With timer function in DC operation to reduce the battery capacity. Ideally suited according to EN 12193.

#### **Technical data**

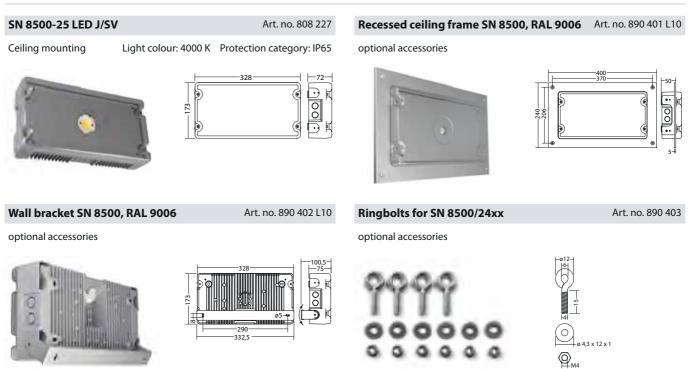
Material:	Die-cast aluminum	Apparent power:	30,9 VA
Illuminant:	LEDs	Effective power:	29,8 W
Luminous flux:	3401 lm	inrush current:	15 A / 82 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	134 mA	Temperature ta:	-15+40 °C
Nominal current DC:	135 mA	Impact resistance:	IK10



•• •	
Effective power:	29,8 W
inrush current:	15 Α / 82 μs
Protection class:	I
Input terminals:	2.5mm <sup>2</sup> feed through wiring
Temperature ta:	-15+40 °C
Impact resistance:	IK10

**Available colours** Add colour code to the article no. e.g. 800 014 LXX

RAL 9006 (White aluminium): L10 Special colour: L99 💋





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# Elegant aluminium surface-mounted downlight for indoor and outdoor use

Thanks to its modern design and high IP65 protection rating, the new SN 8040 surface-mounted spotlight is suitable for both representative and functional areas. As with all new INOTEC products, we apply state-of-the-art lighting technology to this luminaire as well. You can choose between the new INOTEC TES illuminant and a 4x1W LED illuminant. The housing, made of high-quality aluminium, not only impresses with its visual appearance, but also offers sufficient connection space for simple and quick installation.

By using high-quality powder coatings, INOTEC is able to adapt the SN 8040 colour to the architecture. This allows all RAL colours to be realised in a premium structured finish. SN 8040 TES Downlights

J/SV For connection to JOKER-central battery systems



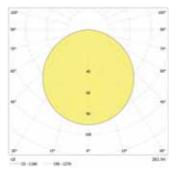


Elegant high-quality LED downlight ideal for area or escape route illumination. Perfect for combined usage of safety and general lighting. Possible adaption to the light colour of the general lighting by Translucent-Emitting-Surface (TES) technology. Powder-coated aluminium housing for ceiling mounting with high protection category and without any visible screws.

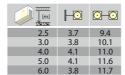
#### **Technical data**

230V

Material:	Aluminium powder-coated	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	261 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



#### Available colours Add colour code to the article no. e.g. 800 014 LXX

SN 8040 LED J/SV		Art. no. 808 162	SN 8040 LED J/SV		Art. no. 808 165
Ceiling mounting	Light colour: 2700 K	Protection category: IP65	Ceiling mounting	Light colour: 3500 K	Protection category: IP65
SN 8040 LED J/SV		Art. no. 808 168			
Ceiling mounting	Light colour: 4300 K	Protection category: IP65			



230V SN 8040-41 Downlights

For connection to JOKER-central battery systems



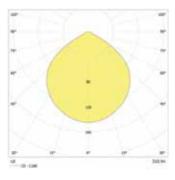


Elegant high-quality LED downlight ideal for area or escape route illumination. Powder-coated aluminium housing for ceiling mounting with high protection category and without any visible screws.

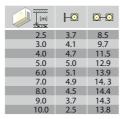
#### **Technical data**

J/SV

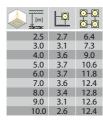
Material:	Aluminium powder-coated	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	310 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 7015 (Slate grey): L16 🔳 🛛 RAL 9016 (Traffic white): L04 📃 🛛 Special colour: L99 💋

#### Articles

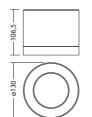
#### SN 8040-41 LED J/SV

Ceiling mounting



#### Art. no. 808 159

#### Protection category: IP65





# Universal surface-mounted spotlight with a flat design

Innovative lighting technology, easy installation and a flat design – these are the features that characterise the new safety luminaire SN 2040.

Different light sources, optimised for the widest possible range of structures, make the SN 2040 a universal safety luminaire. Whether for emergency routes, surface illumination, or mounting heights of up to 24m, the individual lamps ensure standards-compliant illumination.

With its rear cable entries, and optional knock-out side entries, this luminaire's construction also takes into account the trends and changes in electrical installation. Because of the great flexibility, people often resort to an exposed tube installation, even in the case of architecturally sophisticated buildings. The new SN 2040 offers all the advantages of surface mounting, while its flat design blends unobtrusively with the architecture.



### 230V SN 2040.1-41 Polycarbonate luminaires

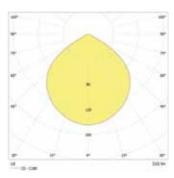
J/SV For connection to JOKER-central battery systems



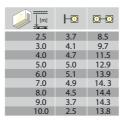
Functional LED downlight with a flat design ideal for area or escape route illumination. UV resistant, heat filament tested polycarbonate housing for ceiling mounting with optional side cable entry.

#### **Technical data**

Material:	Polycarbonate	Apparent power:	7,0 VA
Illuminant:	LEDs	Effective power:	5,5 W
Luminous flux:	310 lm	Inrush current:	6 A / 98 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	31 mA	Temperature ta:	-15+40 °C
Nominal current DC:	32 mA		

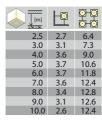


Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8

Sicherheitstechnik GmbH



#### Articles

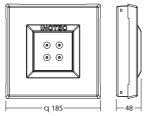
#### SN 2040.1-41 LED J/SV

Ceiling mounting



#### Art. no. 802 119 .1

#### Protection category: IP40



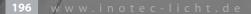


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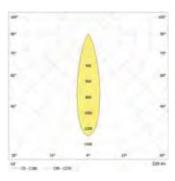
J/SV For connection to JOKER-central battery systems



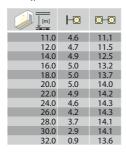
Functional LED downlight with a flat design for mounting height up to 32m, ideal for escape route illumination. UV resistant, heat filament tested polycarbonate housing for ceiling mounting with optional side cable entry.

#### **Technical data**

Material:	Polycarbonate	Apparent power:	7,0 VA
Illuminant:	LEDs	Effective power:	5,5 W
Luminous flux:	277 lm	Inrush current:	6 A / 98 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	31 mA	Temperature ta:	-15+40 °C
Nominal current DC:	32 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Art. no. 802 125 .1

Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8

Sicherheitstechnik GmbH

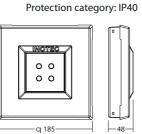
	H-O	0-0
11.0	4.6	11.1
12.0	4.7	11.5
14.0	4.9	12.5
16.0	5.0	13.2
18.0	5.0	13.7
20.0	5.0	14.0
22.0	4.9	14.2
24.0	4.6	14.3
26.0	4.2	14.3
28.0	3.7	14.1
30.0	2.9	14.1
32.0	0.9	13.6

#### Articles

#### SN 2040.1 T LED J/SV

Ceiling mounting





## INOTEC Sicherheitstechnik GmbH





# Ball-impact-proof and shock-resistant luminaires

The robust, ball-impact-proof and shock-resistant safety and exit sign luminaires are not only suitable for use in gyms and sports halls, but can also be used wherever luminaires are exposed to increased mechanical loads.

The luminaires are designed to pass the pendulum hammer test according to EN 50102 without any problems. All luminaires in this series comply with impact resistance class IK10. In addition, the luminaires passed a ball impact test in accordance with DIN VDE 0710-13. This eliminates the need for additional ball protection grids.

Despite these high requirements, these luminaires impress with their slim design and homogeneous illumination, which also makes them suitable for use in visually attractive buildings.

#### **Advantages**

- Easy installation
- Ball-impact-proof according to DIN VDE 0710-13
- Shock-resistant class IK10
- Slim Design

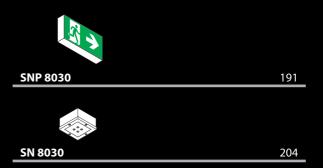
#### Applications

- Gym and sportshalls
- Schools
- Workplaces with higher mechanical demands



Ball-impact-proof luminaires acc. to DIN VDE 0710-13







230V SNP 8030 Ball-impact and shock resistant safety luminaires

J/SV For connection to JOKER-central battery systems



Single sided ball-impact and shock resistant exit luminaire. Powder-coated aluminium housing with slim design and brilliant pictograph illumination > 500cd/m<sup>2</sup>. Perfect for use in environments with high mechanical stresses and in sports facilities.





#### **Technical data**

Viewing distance:	30 m	Apparent power:	10,4 VA
Material:	Sheet steel powder-coated	Inrush current:	6 Α / 98 μs
Illuminant:	LEDs	Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	45 mA	Impact resistance:	IK10
Nominal current DC:	18 mA		

Add colour code to the article no. e.g. 800 014 LXX **Available colours** 

RAL 9016 (Traffic white): L04

RAL 7015 (Slate grey): **L16** 

Special colour: L99 💋

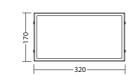
#### Articles

SNP 8030 LED J/SV Art. no. 808 702 SNP 8030 WE LED J/SV Wall mounting Protection category: IP40 Recessed wall mounting

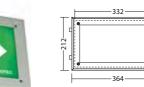
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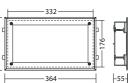
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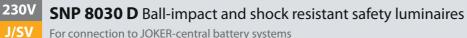






Art. no. 808 703

Protection category: IP40



For connection to JOKER-central battery systems



Double-sided ball-impact and shock resistant exit-luminaire. Powder-coated metal housing with slim design and brilliant pictograph illumination > 500cd/m<sup>2</sup>. Perfect for use in environments with high mechanical stresses and in sports facilities.





#### **Technical data**

Viewing distance:	30 m	Inrush current:	6 A / 98 µs
Material:	Sheet steel powder-coated	Protection class:	I
Illuminant:	LEDs	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal voltage AC:	230V ±10% 50/60 Hz	Temperature ta:	-15+40 °C
Nominal voltage DC:	176 - 264 V	Impact resistance:	IK10
Available colours	Add colour code to the article no. e.g. 800 01	4 <b>LXX</b>	
RAL 9016 (Traffic white	): <b>L04</b> RAL 7015 (Slate grey): <b>L16</b>	Special colour: L99 💋	

#### Articles

#### SNP 8030 D LED J/SV

Ceiling mounting





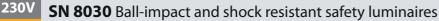
Art. no. 808 704

Protection category: IP40









J/SV For connection to JOKER-central battery systems



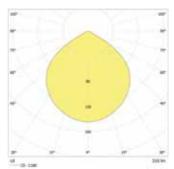
Ball-impact and shock resistant safety luminaires with state-of-the-art LED-technology for area or escape route illumination. Powder-coated aluminium housing with slim design, perfect for use in environments with high mechanical stresses and in sports facilities.



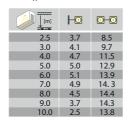


#### **Technical data**

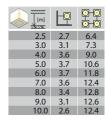
Material:	Sheet steel powder-coated	Apparent power:	8,3 VA
Illuminant:	LEDs	Inrush current:	8 A / 50 μs
Luminous flux:	310 lm	Protection class:	T
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	36 mA	Impact resistance:	IK10
Nominal current DC:	32 mA		



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8



**Available colours** Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04

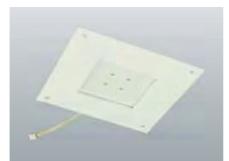
RAL 7015 (Slate grey): L16

Special colour: L99 💋



230V SN 8030 E Ball-impact and shock resistant safety luminaires

For connection to JOKER-central battery systems



Ball-impact and shock resistant safety luminaires with state-of-the-art LED-technology for area or escape route illumination. Powder-coated aluminium housing with slim design, perfect for use in environments with high mechanical stresses and in sports facilities.

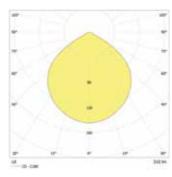




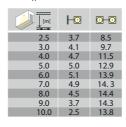
#### **Technical data**

J/SV

Material:	Sheet steel powder-coated	Apparent power:	8,3 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Luminous flux:	310 lm	Protection class:	II
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	36 mA	Impact resistance:	IK10
Nominal current DC:	32 mA		

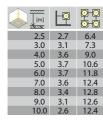


Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8

Art. no. 890 490



**Available colours** Add colour code to the article no. e.g. 800 014 LXX

6

RAL 9016 (Traffic white): L04

Special colour: L99 💋

#### Articles

#### **SN 8030 E LED J/SV**

Recessed ceiling mounting



Art. no. 808 711

0

RAL 7015 (Slate grey): L16

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- 🗆 125

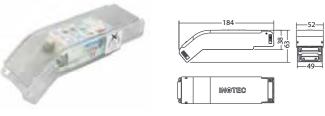
Protection category: IP20

-23-





LED-Supply 230-3 J-SV SK II ext.







# Moulded plastic luminaires Universal emergency exit and safety luminaires

INOTEC offers a wide range of moulded plastic luminaires. The different housing sizes and versions allow you to personalise your emergency lighting. The range includes luminaires with one-, two- or three-sided light output, as well as luminaires with a high protection rating.

#### **Advantages**

- Different housing sizes
- Protection ratings up to IP65

#### **Areas of application**

- Workplaces
- Car parks
- Outdoor areas





## Moulded plastic luminaires, made in Germany

#### The new moulded plastic luminaires

SN 2100, SN(P) 2130 and SNP 2230 were designed and constructed completely in house.

A close collaboration with our customers, designers and fitters allowed us to take into account requests and suggestions during the construction phase, so we have been able to satisfy all the demands placed on a moderrn moulded plastic luminaire.

The polycarbonate housing and all other components are produced in Germany. This guarantees that they meet the high standards for products Made in Germany.

With its optimised lighting technology, the SN 2100 LED is ideal not just for illuminating escape routes and open (anti-panic) areas, but also for illuminating halls or high-bay warehouses with high mounting heights.







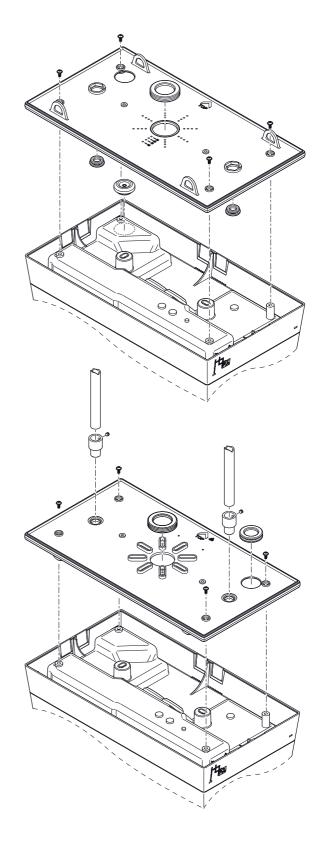


# Numerous mounting options thanks to the optional mounting adapter















# The high protection rating and the housing's protective insulation allow use in difficult ambient conditions

The luminaires are made from high-quality UV-resistant polycarbonate that passes the 850°C hot-wire test and are optionally available in protection categories IP40 and IP65. The separate terminal compartment guarantees protection class II and the high protection rating IP65.

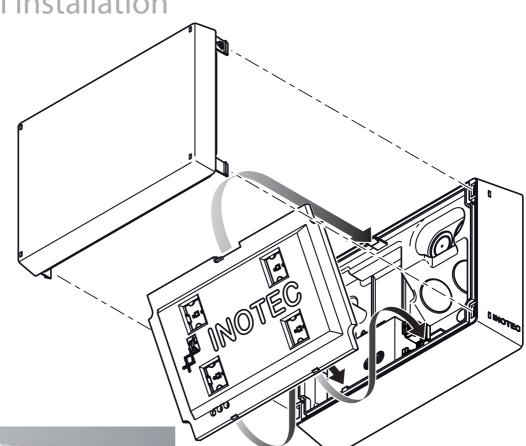




# Easy to mount in both on-wall and in-wall installation

## Quick to install in five easy steps

- 1. Install luminaire housing
- 2. Connect power cable
- 3. Fit illuminant
- 4. Click reflector into place
- 5. Close cover



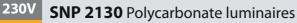




With on-wall installations, pre-moulded lateral openings can simply be punched out. A cable inlet ensures the power cable is inserted cleanly. The separate terminal compartment inside the luminaire further guarantees the high protection rating IP65. There are two mouldings on each of three sides of the luminaire, so that through-wiring is also possible.

A slightly raised surface on the back of the luminaires ensures that they can be mounted on uneven walls without compromising their tightness. The luminaires' special construction ensures there is no warping, which often leads to leaks in conventional housing constructions. The optional adapter for chain and pendulum mounting is also perfect for installation on trapezoidal sheets and rail systems.





J/SV For connection to JOKER-central battery systems



Single sided LED exit luminaire made of UV resistant, heat filament tested polycarbonate housing with optional side cable entry and comfortable installation space. Homogeneous illumination by state-of-the-art LED technology.





#### **Technical data**

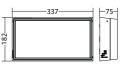
Viewing distance:	30 m	Nominal current DC:	32 mA
Material:	Polycarbonate	Apparent power:	8,3 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C

#### Articles

#### SNP 2130 LED J/SV

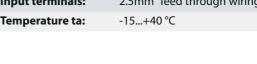
Wall mounting





Art. no. 802 607

Protection category: IP40



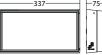
#### Wall mounting

SNP 2130 LED J/SV



Protection category: IP65

Art. no. 802 610





230V SNP 2230 Polycarbonate luminaires

For connection to JOKER-central battery systems



Double-sided LED emergency exit luminaire made of UV resistant, heat filament tested polycarbonate housing with optional side cable entry and comfortable installation space. Homogeneous illumination by state-of-the-art LED technology.





#### **Technical data**

J/SV

Viewing distance:	30 m	Nominal current DC:	32 mA
Material:	Polycarbonate	Apparent power:	8,3 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C

#### Articles

#### SNP 2230 LED J/SV

Ceiling mounting

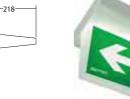


Protection category: IP40

J.

Art. no. 890 051

Art. no. 802 613

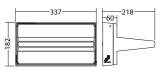


SNP 2230 LED J/SV Ceiling mounting



Art. no. 802 616

#### Protection category: IP65

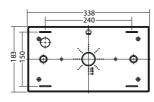


chain mounting adapter SN 2130

182-

optional accessories



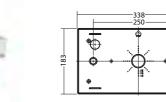


pendulum mounting adapter SN 2130

optional accessories

Protection category: IP40

Art. no. 890 052



230V J/SV

### SN 2100 Polycarbonate luminaires

For connection to JOKER-central battery systems



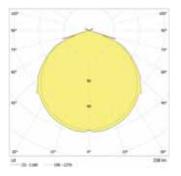


Universal LED downlight ideal for area or escape route illumination. UV resistant, heat filament tested polycarbonate housing with optional side cable entry and comfortable installation space.



#### **Technical data**

Material:	Polycarbonate	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	338 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	⊩■		1-1	
2.5	4.0	10.0	10.3	4.0
3.0	4.3	10.8	11.0	4.3
4.0	4.6	12.0	12.3	4.8
5.0	4.7	12.8	13.1	4.9
6.0	4.6	13.2	13.7	4.9
7.0	4.3	13.4	13.9	4.4
8.0	3.7	13.3	13.9	3.8
9.0	2.5	13.0	13.3	2.7
10.0	1.7	12.1	12.9	1.9

Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8

2.5	2.7	8.4	8.5	2.7
3.0	2.9	9.1	9.2	2.9
4.0	3.0	10.4	10.5	3.0
5.0	3.0	11.5	11.6	3.0
6.0	3.0	12.3	12.4	3.0
7.0	3.2	12.5	12.6	3.2
8.0	3.1	12.5	12.6	3.1
9.0	2.8	12.2	12.1	2.8
10.0	2.3	12.0	12.1	2.3

#### Articles

#### SN 2100 LED J/SV

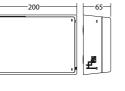
Ceiling mounting



chain mounting adapter SN 2100

Protection category: IP40

Art. no. 802 101

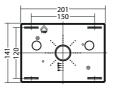


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Art. no. 890 724

optional accessories





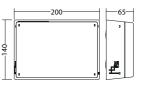
### SN 2100 LED J/SV

Ceiling mounting

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Protection category: IP65





### SN 2100 T Polycarbonate luminaires

For connection to JOKER-central battery systems



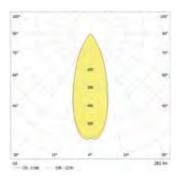


Universal LED downlight ideal for escape route illumination. UV resistant, heat filament tested polycarbonate housing with optional side cable entry and comfortable installation space.

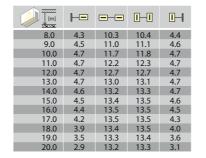


#### **Technical data**

Material:	Polycarbonate	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	281 lm	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



Minimum illumination 1.0 Lux (area illumination), Maintenance factor 0.8

10.0	3.5	9.5	9.5	3.6
11.0	3.5	10.1	10.1	3.5
12.0	3.5	10.5	10.5	3.5
13.0	3.5	11.1	11.1	3.5
14.0	3.4	11.5	11.5	3.4
15.0	3.2	11.8	11.8	3.2
16.0	3.2	11.8	11.8	3.2
17.0	3.1	12.0	12.0	3.1
18.0	3.0	12.0	12.0	3.0
19.0	2.9	11.8	11.8	2.9
20.0	2.7	11.3	11.3	2.7

#### Articles

#### SN 2100 T LED J/SV

Ceiling mounting



chain mounting adapter SN 2100

Art. no. 890 724

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Art. no. 802 113

Protection category: IP40

200

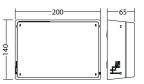
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**SN 2100 T LED J/SV** Ceiling mounting



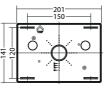


Protection category: IP65



optional accessories







### SN 2100 TB Polycarbonate luminaires

J/SV For connection to JOKER-central battery systems



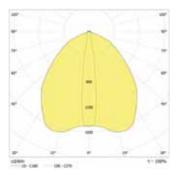


Universal LED downlight for mounting height up to 18m, ideal for illumination of 3m – 4m wide escape routes. UV resistant, heat filament tested polycarbonate housing with optional side cable entry and comfortable installation space.

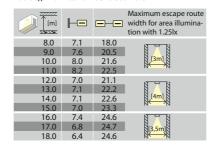


#### **Technical data**

Material:	Polycarbonate	Nominal current DC:	32 mA
Illuminant:	LEDs	Apparent power:	8,3 VA
Luminous flux:	329 lm	Inrush current:	8 A / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	II
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	36 mA	Temperature ta:	-15+40 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8



#### Articles

#### SN 2100 TB LED J/SV

Ceiling mounting



chain mounting adapter SN 2100

Art. no. 890 724

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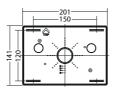
Art. no. 802 142

Protection category: IP40

-140-

optional accessories





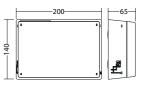
#### Ceiling mounting

SN 2100 TB LED J/SV

2 2 2 2



Art. no. 802 139



J/SV For connection to JOKER-central battery systems



Double-sided LED emergency exit luminaire made of UV resistant, heat filament tested polycarbonate housing. Homogeneous pictograph illumination by state-of-the-art LED technology.

#### **Technical data**

Viewing distance:	14 m	Nominal current DC:	25 mA
Material:	Polycarbonate	Apparent power:	7,1 VA
Illuminant:	LEDs	Inrush current:	8 Α / 50 μs
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	I
Nominal voltage DC:	176 - 264 V	Input terminals:	2.5mm <sup>2</sup> feed through wiring
Nominal current AC:	31 mA	Temperature ta:	-15+40 °C

#### Articles

#### SNP 1006 LED J/SV

Wall or ceiling mounting



-126	
	80-

Art. no. 801 556

Art. no. 190 153

Protection category: IP20

chain mounting adapter 1006/1007

optional accessories



210 210 210	
258	<u>⊢80</u>

wall bracket 1006/1007

optional accessories

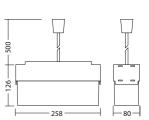


9 <del>11</del> 9 <del>11</del> 911 911 8,5 30
5-30-

### pendulum adapter 1006/1007

optional accessories





Sicherheitstechnik GmbH

Art. no. 190 154

Art. no. 190 152







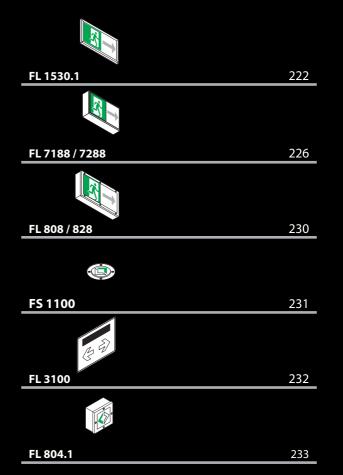
## Dynamic emergency exit sign luminaires FL-Series

Dynamic emergency exit luminaires of the FL series can be used to indicate, block or change escape routes depending on a fire event.

Luminaires of the types FL 1530, FL 7188 and FL 808 are particularly suitable for combining dynamic and static luminaires, as they are also available as static emergency exit luminaires.

Instead of the static direction indicator, an arrow matrix indicates the safe route in the event of a fire, or closes off a smokefilled area.

The FL range offers luminaires for almost every application – from robust stainless-steel luminaires with a high protection class to state-of-the-art, elegantly designed luminaires from the 'Straight Line' range.







for connection to D.E.R.-controller or CP D.E.R. 230V





Dynamic single-sided Straight-Line emergency exit sign luminaire made of high quality, powder-coated aluminium. Ideal to display the safe escape route depending on the smoke situation inside a building.

#### **Technical data**

Viewing distance:	30 m	Nominal current DC:	33 mA
Material:	Aluminium powder-coated	Apparent power:	14,30 VA
Illuminant:	LEDs	Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	1,5mm <sup>2</sup>
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	62 mA		

**Available colours** Add colour code to the article no. e.g. 800 014 LXX

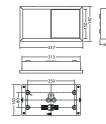
RAL 9016 (Traffic white): **L04** Special colour: L99 💋

#### Articles

#### FL 1530 PM LED 230V

Parallel wall mounting





Art. no. 800 141 V

Protection category: IP40



FL 1530 WE LED 230V



Art. no. 800 143 V





### FL 1530 D/WA/P Straight-Line

for connection to D.E.R.-controller or CP D.E.R. 230V





Dynamic double-sided straight-line emergency exit sign luminaire made of high quality, powder-coated aluminium. Ideal to display the safe escape route depending on the smoke situation inside a building. For single-sided use, the current consumption is reduced by 50%.

#### **Technical data**

Viewing distance:	30 m	Nominal current DC:	66 mA
Material:	Aluminium powder-coated	Apparent power:	28,60 VA
Illuminant:	LEDs	Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	1,5mm²
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	124 mA		

Available colours Add colour code to the article no. e.g. 800 014 LXX

RAL 9016 (Traffic white): L04 📃 Special colour: L99 💋

#### Articles

#### FL 1530 D LED 230V

Ceiling mounting



#### FL 1530 WA LED 230V

Wall bracket mounting



P5	
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280	
	Art. no. 800 149 V

-300

Art. no. 800 147 V

Protection category: IP40

## 

Protection category: IP40

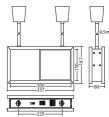
#### FL 1530 P LED 230V

Pendulum mounting



#### Art. no. 800 145 V

#### Protection category: IP40









Dynamic single-sided emergency exit sign luminaire made of high quality aluminium profile. Ideal to display the safe escape route depending on the smoke situation inside a building.

#### **Technical data**

Viewing distance:	35 m	Nominal current DC:	33 mA
Material:	Aluminium	Apparent power:	14,30 VA
Illuminant:	LEDs	Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	1,5mm <sup>2</sup>
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	62 mA		

#### Articles

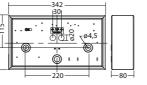
FL 7188 LED 230V

Art. no. 800 101 V

Wall mounting

Protection category: IP40











Dynamic double-sided emergency exit sign luminaire made of high quality aluminium profile. Ideal to display the safe escape route depending on the smoke situation inside a building. For single-sided use, the current consumption is reduced by 50%.

#### **Technical data**

Viewing distance:	35 m	Nominal current DC:	66 mA
Material:	Aluminium	Apparent power:	28,60 VA
Illuminant:	LEDs	Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	1,5mm²
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	124 mA		

#### Articles

$ \begin{array}{c} \hline \\ \hline $	FL 7288 D LED 230V	Art. no. 800 103 V	FL 7288 K LED 230V	Art. no. 800 109 V
$ \begin{array}{c} \hline \\ \hline $	Ceiling mounting	Protection category: IP40	Chain mounting	Protection category: IP40
Pendulum mounting     Protection category: IP40     Wall bracket mounting     Protection category			Contraction of the second seco	
	FL 7288 P LED 230V	Art. no. 800 107 V	FL 7288 WA LED 230V	Art. no. 800 105 V
220	Pendulum mounting	Protection category: IP40	Wall bracket mounting	Protection category: IP40







### FL 808 Stainless steel luminaire

for connection to D.E.R.-controller or CP D.E.R. 230V





Dynamic single-sided emergency exit luminaire made of robust stainless steel with high protection category. Ideal to display the safe escape route depending on the smoke situation inside a building.

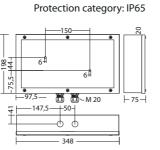
#### **Technical data**

Viewing distance:	30 m		Nominal current DC:	33 mA
Material:	Stainless steel		Apparent power:	14,30 VA
Illuminant:	LEDs		Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz		Input terminals:	1,5mm <sup>2</sup>
Nominal voltage DC:	176 - 264 V		Temperature ta:	-15+40 °C
Nominal current AC:	62 mA			
Available colours	Add colour code to the article no. e.c	g. 800 014 I	LXX	
stainless steel: L30	RAL 7015 (Slate grey): <b>L16</b>	RAL 9016 (1	Traffic white): <b>L04</b>	Special colour: <b>L99</b> 💋
Articles				

#### FL 808 LED 230V

Wall mounting





Art. no. 800 181 V







Dynamic double-sided emergency exit luminaire made of robust stainless steel with high protection category. Ideal to display the safe escape route depending on the smoke situation inside a building. For single-sided use, the current consumption is reduced by 50%.

#### **Technical data**

Viewing distance:	30 m	Nominal current DC:	66 mA
Material:	Stainless steel	Apparent power:	28,60 VA
Illuminant:	LEDs	Protection class:	1
Nominal voltage AC:	230V ±10% 50/60 Hz	Input terminals:	1,5mm <sup>2</sup>
Nominal voltage DC:	176 - 264 V	Temperature ta:	-15+40 °C
Nominal current AC:	124 mA		
Available colours A	Add colour code to the article no. e.g. 800 (	014 <b>LXX</b>	
stainless steel: L30	RAL 7015 (Slate grey): <b>L16</b> RAL 90	16 (Traffic white): <b>L04</b>	Special colour: <b>L99 </b> /
Articles			
Articles FL 828 K LED 230V	Art. no. 800 183 \	FL 828 WA LED 230V	Art. no. 800 185 V
	Art. no. 800 183 \ Protection category: IP65		Art. no. 800 185 V Protection category: IP65









Dynamic Escape Route luminaire for floor installation, including run light functionality. Ideal to display the safe escape route depending on the smoke situation inside a building. Power supply by PSU 48.

#### **Technical data**

Material:	Stainless steel	Protection class:	III
Illuminant:	LEDs	Input terminals:	2,5mm <sup>2</sup> feed through wiring
Nominal voltage DC:	48 V ±10 %	Temperature ta:	-15+40 °C
Nominal current DC:	35 mA		

**Available colours** Add colour code to the article no. e.g. 800 014 LXX

RAL 7015 (Slate grey): L16 RAL 9006 (White aluminium): L10

Articles

#### FS 1100 BE D.E.R. 48V

Flush floor installation



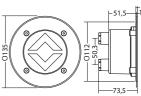
Art. no. 800 161

-10,2 4,3

FS 1100 TE D.E.R. 48V

Flush carpet installation

Art. no. 800 160







### FL 3100 Wall, floor and stair luminaire

for connection to D.E.R.-controller or CP D.E.R. 230V





Dynamic escape route segment luminaire for recessed wall installation and modular design with customisable assembly. Ideal to display the safe escape route depending on the smoke situation inside a building. With integrated LED safety luminaire.

#### **Technical data**

Material:	Sheet steel powder-coated	Nominal current DC:	36 mA
Illuminant:	LEDs	Apparent power:	8,00 VA
Nominal voltage AC:	230V ±10% 50/60 Hz	Protection class:	1
Nominal voltage DC:	176 - 264 V	Input terminals:	1,5mm <sup>2</sup>
Nominal current AC:	35 mA	Temperature ta:	-15+40 °C
Available colours	Add colour code to the article no. e.g. 800 01	4 <b>LXX</b>	
RAL 9016 (Traffic white)	: <b>L04</b> RAL 7015 (Slate grey): <b>L16</b>	Special colour: L99 💋	
Anticlos			

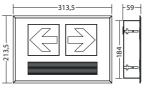
#### Articles

#### FL 3100 WE LED 230V

Recessed wall mounting

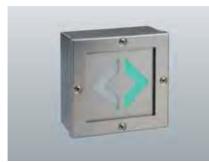
Art. no. 800 152 V Protection category: IP40











Dynamic escape route segment luminaire with runlight function made of robust stainless steel with high protection category. Ideal to display the safe escape route depending on the smoke situation inside a building.

#### **Technical data**

Material:	Stainless steel	Protection class:	III
Illuminant:	LEDs	Input terminals:	2,5mm <sup>2</sup> feed through wiring
Nominal voltage DC:	48 V ±10 %	Temperature ta:	-15+40 °C
Nominal current DC:	35 mA		

Available colours Add colour code to the article no. e.g. 800 014 LXX

stainless steel: L30 📃 🦳 Special colour: L99 💋

#### Articles

#### FS 804.1 W D.E.R. 48V

Wall mounting



#### FS 804.1 WAP D.E.R. 48V

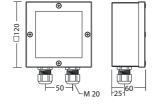
Wall bracket mounting





Art. no. 800 028

Protection category: IP65

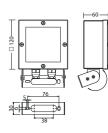


FS 804.1 WA D.E.R. 48V Wall bracket mounting



### Art. no. 800 027

Protection category: IP65



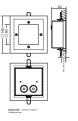
#### FS 804.1 WE D.E.R. 48V

#### Recessed wall mounting





Protection category: IP65







## EX-luminaires Emergency exit sign and safety luminaires

The Ex luminaire series offers emergency exit sign and safety luminaires in 24V technology for hazardous areas in zones 1, 2, 21 and 22. The luminaires can be used as safety luminaires for wall and ceiling mounting and with pictogram as escape sign luminaires for wall mounting.

#### **Advantages**

- 24V technology
- Versatile mounting possibilities

#### **Applications**

- Explosion-hazardous zones 1, 2, 21 and 22
- Laboratory facilities
- Painting booths
- Chemical industry









J/SV For connection to JOKER-central battery systems

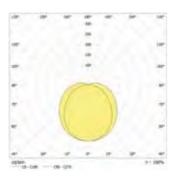




Ex-safety- /exit-luminaire for zone 1, 2, 21, 22. Made of high-quality glass fiber reinforced polyester resin for wall or ceiling mounting.

#### **Technical data**

Viewing distance:	30 m	Nominal current DC:	25 mA
Material:	Polyester, Polycarbonate	Apparent power:	6,5 VA
Illuminant:	LEDs	Effective power:	6,0 W
Nominal voltage AC:	230V ±10% 50/60 Hz	Inrush current:	35 A / 95 μs
Nominal voltage DC:	176 - 264 V	Protection class:	1
Nominal current AC:	28 mA	Temperature ta:	-30+60 °C



Minimum illumination 1.0 lx (middle of escape route), Maintenance factor 0.8

	⊨■		<b>I</b> — <b>I</b>	
2.0	2.8	9.4	11.1	4.4
3.0	4.3	10.1	12.7	4.9
4.0	4.7	12.0	13.7	5.2
5.0	4.8	12.8	14.5	5.3
6.0	4.8	13.3	14.9	5.2
7.0	4.6	13.6	15.1	5.0
8.0	4.1	13.6	15.0	4.5
9.0	3.4	13.4	14.6	3.7
10.0	2.0	12.9	14.0	2.2

#### Articles

EX 7102 LED J/SV

Wall or ceiling mounting



Art. no. 807 004

#### Protection category: IP66







## Your key contact for emergency lighting!

Since its foundation in 1995 INOTEC Sicherheitstechnik GmbH has grown into a medium-sized company with more than 250 employees. We became a firm partner for a lot of planner and installer in the field of emergency and safety lighting. This means for us that you can count with our expertice at any time during your project.

### Planning





Our nationwide distribution team supports you early within the country and abroad with the project planning and the selecting of a suitable emergency lighting system.

To offer you shorter ways and more availability for technical and business questions we have four distrubition centres in Pinneberg, Potsdam, Nördlingen and Ense.







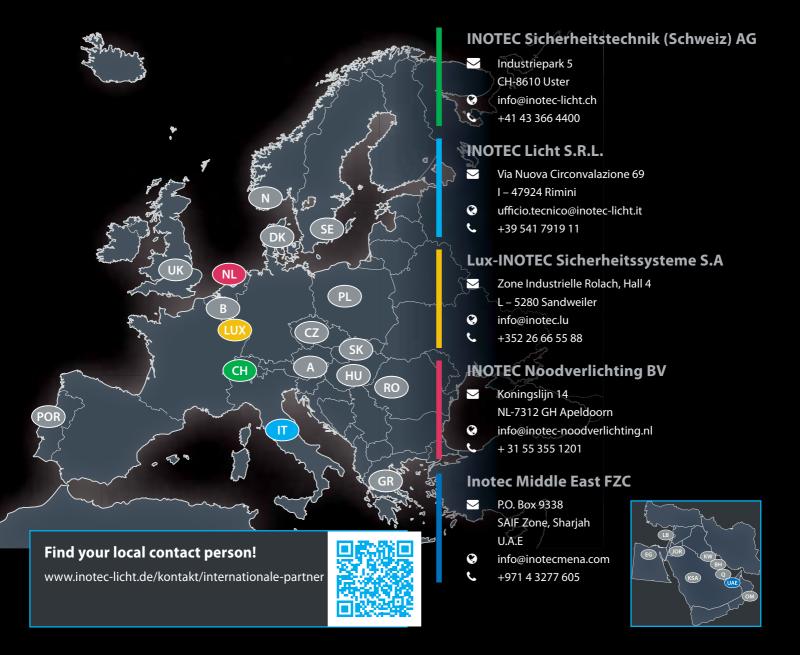


## The art of being local

INOTEC Sicherheitstechnik GmbH is represented in many countries of Europe and the Middle East by agencies and strategic partners for sales and service purposes. Working closely with our export department in our parent company in Germany, we develop together the required know-how to fulfill all practical and theoretical requirements of emergency lighting applications. Thus, we ensure commercial and technical support for emergency lighting applications on the spot by taking local standards into account.

#### Your benefits:

- + Contact person in your region
- + Consideration of local standards
- + On-site training in practical and theoretical subject





## On spot for you

Your sales representative, responsible for your area is your contact person and gets supported by the technical and commercial internal sales in the local office. As a team, they take care of your concerns regarding safety lighting and support your project design.

Training facilities are available in every sales centre to encourage the dialogue between INOTEC and the customers. Beside theoretical topics like emergency lighting standards, practical knowledge on INOTEC products is presented in a comprehensible and up-to-date manner.

- + Your benefits:Personal, local contact person
- + Focus on your regional requirements and expectations
- Product training and knowledge transfer in your regional sales centre



#### **Find your local contact person!** www.inotec-licht.de/kontakt/ansprechpartner/



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   14478 Potsdam
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### Sales centre South

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- +49 9081 80 57 9 -10

### Sales centre West

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- buero-west@inotec-licht.de
- +49 2938 97 30 -775



## Service is the key





## Luminaire categories

### High protection category >IP54

Туре	Category	Page
SN 6114	step luminaire	135
SN 6204.2	wall luminaire	137
SN 804	stainless steel luminaire	153
SN 8040	downlight	191
SNP 808 / SNP 828	stainless steel luminaire	148
FL 808 / FL 828	stainless steel luminaire	228
SN 2100	polycarbonate luminaire	216
SNP 2130 / SNP 2230	polycarbonate luminaire	213
SN 8500	downlight	185

#### **Protection class II**

Туре	Category	Page
SN 2100/2130	polycarbonate luminaire	216
SN 2420	exit luminaire	127
SNP 2435	exit luminaire	129
SN 9100	downlight	159
SN 9400	downlight	165
SNP 2130 / SNP 2230	polycarbonate luminaire	213
SNP 2004.1 / SN 2004.1	wall and step luminaire	140



## D.E.R. Dynamic Escape Routing

Deeper information about the D.E.R. system and luminaires can be found in the specific D.E.R. catalogue.

#### **Dynamic exit sign luminaires**

With the dynamic emergency exit luminaires from the FL-range, escape routes can be signposted, blocked or changed, depending on the fire event.

The luminaire types FL 1530.1, FL 7188 and FL 808 are suitable especially for a mixture use of dynamic and static exit sign luminaires in a building, as these luminaire types are also available in a static version. Instead of the standard exit sign, a LED matrix shows the safe way in case of emergency and blocks the smoky areas.

Туре	Category	Page
FL 1530.1	straigh- line	222
FL 7188 / 7288	aluminium profile luminaire	224
FL 808 / FL 828	stainless steel luminaire	228
FL 3100	wall luminaire	232
FS 1100	recessed floor luminaire	231
FS 804	stainless steel luminaire	233







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