

Johnson Controls

## **About Triatek**

Headquartered in Norcross, Georgia, Triatek has been on the forefront of designing and manufacturing innovative airflow solutions for critical environments since 1985.

Triatek provides complete end-to-end solutions for healthcare facilities and laboratories including Venturi valves, room pressure controllers, fume hood controllers, remote monitors, sensors, actuators, and more all designed to seamlessly integrate into a facility's building automation system (BAS).

> Triatek products can be used together as a complete system, but they are also designed to allow for "plug-and-play" functionality within an existing BAS, and can be fitted onto older components to upgrade them with the latest technology. Our products are rigorously tested, ensuring the highest quality, dependability, and user experience.

## **Critical Environments and HVAC Systems**

Medium Pressure Venturi Valve

HVAC systems are an important component of critical environments. From operating suites to chemistry labs and burn units, Triatek's product line plays a unique role in mitigating the spread of infection-causing airborne contaminants, and preventing harmful chemicals and gases from re-circulating in the air. Our products help facilities comply with the *ANSI/ASHRAE/ASHE Standard 170 for Ventilation of Health Care Facilities,* and they are an integral part of energy efficient designs that minimize utility costs and improve building automation flexibility.

# **A Few of Our Clients**



Innovative Airflow Solutions for Critical Environments

## **Triatek Product Installations are Worldwide**



## **Commitment to Innovation**

Triatek is committed to continuous product innovation. We have introduced

ideas that are now standard in the "One of my hospital industry including stainless steel Venturi valves, sidewall sensing with velocity override for fume hoods, fast-acting actuators, and touchscreen controllers with 180° edge lighting.

By working closely with our customers, Triatek's engineers continue to design intuitive products that utilize the latest

technology. When you choose Triatek, you are choosing the most innovative products on the market.

## **Customer Service**

clients urgently

needed FMS-1655s

and Triatek worked

overtime to ensure

were immediately

their isolation rooms

Triatek's customer service is unparalleled.

Our product support system includes on-site installations, phone support, repairs, calibrations, and in-depth training sessions. during the Ebola crisis

From our knowledgeable engineers and sales team to our talented field technicians, Triatek goes above and beyond to prepared for patients." ensure our products are - Triatek Sales Representative installed correctly and our customers' critical environments are working properly.



Pressure Controller

HMS-1655 Fume Hood Controller

# HMS-1655 Fume Hood Controller

By controlling and monitoring a fume hood's airflow, the HMS-1655 provides scientists with confidence that they are protected from toxic vapors, fumes, and dusts during experiments.

The HMS-1655 features a user-friendly touchscreen with bold graphics and "Through my

intuitive menus. The home screen displays sash height, face velocity, hood status, flow,

Occupied

temperature, time, and date.

#### The HMS-1655 instantly updates

as fume hood conditions change and has both visual and audible alarms. The settings can be customized by the user, and the multilevel password protection option provides added security.

experience as a

controllers are

easier to install

and users love

menus."

the touchscreen

-Triatek Customer

The glowing, color-coded Safety Halo™ edge lighting allows users to quickly discern a hood's status from anywhere in the lab, ensuring safe working conditions.

The HMS-1655 utilizes a closed-loop system to better regulate air entering

and exiting the fume hood, and communicates with a face contractor. Triatek velocity flow sensor and sash position sensor to produce truer fume hood readings with a higher degree of reliability, safety, and energy efficiency.

> It is available in plastic surface mount and is BACnet®, LonWorks®, and Metasys N2® compatible for easy BAS integration, and is BTL Listed. Triatek also offers the HMS-1655 LITE for fume hoods that do not require integration in the BAS.

## VAV-1000L Controller

Triatek's VAV-1000L Volumetric Offset Controller guickly and accurately controls airflow in zones that require predetermined offsets between supply and exhaust air. Programmed using LonWorks® software, the VAV-1000L provides temperature control, room exhaust air control, and room supply air control.

HMS-1655 in Caution Mode



VAV-1000L

Innovative Airflow Solutions for Critical Environments

Safety Halo™



# FMS-1655 Room Pressure Controller

Triatek's FMS-1655 controls the airflow patterns, temperature, humidity, and room pressure of a critical space. It helps mitigate dangerous airborne pathogens and enables your facility to meet CDC and ANSI/ASHRAE/ASHE standard guidelines.

The FMS-1655 has both audible and visual alarms and a user-friendly touchscreen with bold, modern graphics that simultaneously displays:

- · Room pressure
- Humidity
- Temperature
- Air changes
- Room/alarm status
- · Time and date

The FMS-1655 also features Triatek's signature Safety Halo<sup>TM</sup> edge lighting that provides  $180^{\circ}$  of visibility, and allows users to monitor their critical spaces with a simple glance.

The Safety Halo<sup>™</sup> is great for downthe-hall monitoring and the glowing, color-coded visual alarm helps prevent against audible alarm fatigue.

The FMS-1655 is available in stainless steel flush mount for busy hospital hallways, or a smaller plastic surface mount. It is is BACnet®, LonWorks®, and Metasys N2® compatible for easy BAS integration, and is also BTL Listed.

Triatek offers a thin flush mount option for extremely shallow wall cavities. .

ISOLATION CONTROLLER

Clean Cycle Mode allows for isolation room turnover with the tap of a finger.

RIATEK

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FMS-1655 w/ Safety Ha

02:55:51

FMS-1655 Stainless Steel Flush Mount



CMS-1655 Plastic Surface Mount

# **CMS-1655 Central Monitoring Station**

Triatek's CMS-1655 Central Monitoring Station allows users to simultaneously monitor the parameters of up to four critical spaces.

The CMS-1655 is ideal for nurses' stations and other scenarios with multiple critical environments that require constant monitoring. The color-coded graphical touchscreen interface provides at-a-glance monitoring of room pressure, humidity, temperature, room/alarm status, and more.

This remote monitoring device allows users to more quickly address compromised critical environments, better protecting occupants from airborne hazards. It utilizes the same Safety Halo<sup>™</sup> edge lighting as the FMS-1655, alerting users with both visible and audible alarms.

The CMS-1655 is available in plastic surface mount or stainless steel flush mount.

"The internal struts on Triatek's Venturi valves are much stronger than other valve manufacturers. The quality is excellent."



*Triatek valves have the most robust internal struts on the market.* 

## About Triatek's Venturi Valves

Critical environment airflow demands the most precise and dependable instruments in the HVAC industry. The top healthcare facilities and laboratories rely on Triatek's Venturi valves to protect occupants from harmful airborne pathogens and chemicals. The exceptional design of our valves means they are not only dependable and accurate but also low-maintenance, energy efficient, and easy to install.



#### ACT-FA-8002 Actuator

Universal Venturi Valve Module

Triatek's Venturi valves are pressure-independent, variable volume valves that maintain a desired air volume independent of static pressure changes. Our valves are accurate to within +/- 5%, and the fast-acting actuators provide a rapid response to changing conditions, which ensures the airflow is maintained at desired levels.

## **Venturi Valve Options**

Triatek offers the most Venturi valve options in the industry and our engineers can customize valves to fit your project's needs. All valves are strenuously tested and calibrated to your specifications before leaving the factory. Options include:

- Aluminum or stainless steel valve material
- Medium or low pressure valves
- Partially closed or shut-off valves
- Constant volume or actuated valves
- Fast-acting or standard-acting actuators
- Heresite® and Kynar® coatings
- Thermal insulation for reduced heat loss
- 8", 10", 12", and 14" diameter valves
- Ganged valves for increased airflow
- Horizontal or vertical orientation

## **Universal Valve Module**

Ideal for renovations or new installations in which controllers from multiple vendors are employed, Triatek's Universal Valve Module (UVM) enables our Venturi valve to be become the most flexible valve in the industry. The UVM accepts any 0-10VDC or Modbus® signal and converts it to CFM control, making it compatible with most any controller on the market.

## **Integrated Healthcare Solutions**

Healthcare settings require superior airflow control to protect occupants from airborne pathogens and healthcare-acquired infections. Our healthcare solutions provide everything you need to ensure your facilities are equipped to maintain a safe, therapeutic, and comfortable environment while also adhering to mandatory standards for healthcare ventilation and infection control.

The FMS-1655 works in unison with our Venturi valve to provide consistent room pressurization, air changes per hour, humidity, and temperature control while the Safety Halo<sup>™</sup> ensures staff can easily monitor critical spaces down long hospital hallways. The CMS-1655 is ideal for nurses' stations, allowing for simultaneous monitoring of multiple spaces from a central location.

#### Triatek Provides Complete Healthcare Solutions for:

- Operating Rooms and Anterooms
- Isolation Rooms and Intensive Care Units
- Clean Rooms and Sterile Storage
- Pharmaceutical Manufacturing

# **Integrated Laboratory Solutions**

Triatek's laboratory solutions provide best-in-class fume hood protection as well as energy savings, regulation compliance, and building automation flexibility.

Our laboratory solutions utilize a closed-loop fume hood system, providing truer hood readings and an increased level of safety for scientists. The HMS-1655 works harmoniously with our Venturi valve to maintain proper ventilation, temperature, and humidity control to ensure a stable research environment. Triatek offers both Heresite® and Kynar® coatings to extend the life of valves used in labs with corrosive chemicals.

Our healthcare and laboratory solutions are BACnet®, LonWorks®, and Metasys N2® compatible for fluent integration into a facility's BAS.

## Triage and Emergency Rooms

Room A

- Oncology Suites
- Nuclear Medicine Suites
- Burn Units

# Typical Laboratory with Two Fume Hoods

**Typical Double Isolation Room** 

**Control Signal** 

Air Damper

Triatek FMS-1655 **General Exhaust** 

Room B

Room Pressure via BACnet, LON, or N2

Building

Console (Optional)

Automation System

Network



#### Triatek Provides Complete Laboratory Solutions for:

- Research Centers
- Corporate Labs
- High School and University Labs
- Mortuary Science Labs
- Vivariums
- Biocontainment Facilities
- Wet Chemistry Labs
- Food Research Labs



All Triatek products are designed to withstand years of service in the most critical of environments, providing peace of mind and energy efficiency for customers. For more detailed product information refer to www.triatek.com to access data sheets and user manuals.

#### **Controller and Monitor Options**

KEY: M = Monit	tors C =	Controls	U = Una	U = Unavailable									
Product	Differential Pressure	Temp.	Humidity	Air Flow	CO2	Air Changes	lsolation Mode	Room Status	Analog Inputs	Analog Outputs	Digital Inputs	Relay Outputs	Supported Protocols
FMS-1655	С	С	С	С	С	С	С	м	6	4	4	4	BACnet® and Metasys N2®
FMS-1655L	С	С	С	С	С	С	С	м	4	4	4	4	LonWorks®
FMS-1655 LITE	Μ	U	U	U	U	U	М	М	0	2	0	0	n/a
Product	Face Veloci	elocity Sash Exhaust		t Hood	l Status	Analog Inputs	j Αι Οι	Analog Outputs		Re Outj	lay Supported		ed Protocols
HMS-1655	С	C C C		С		6		4 4		4	Ļ	BACnet® and Metasys N2®	
HMS-1655L	С	C C		С		4		4 4		4	L	LonWorks®	
HMS-1655 LITE	М	М	U		Μ	0		2	0	(	)	n/a	

Product	Differential Pressure	Face Velocity	Relative Humidity	Air Flow	CO2	Isolation Mode	Hood Status	Supported Protocols
CMS-1655	М	М	М	М	М	М	М	BACnet® and Metasys N2®

### **Venturi Air Valve Options**

Valve Size	Aluminium	Heresite®	Kynar®◆	Stainless Steel <sup>†</sup>	Ganged*	Insulated	Standard Shut-off	Full Shut-off <sup>‡</sup>	Flanged <sup>**</sup>	Medium Pressure	Low Pressure
8"	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓	×	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>	✓	$\checkmark$	✓
10"	✓	✓	✓	✓	✓	✓	✓	✓	✓	$\checkmark$	$\checkmark$
12"	✓	<ul> <li>✓</li> </ul>	✓	$\checkmark$	✓	✓	✓	✓	✓	$\checkmark$	$\checkmark$
14"	✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	×	~	✓	×	×	✓	✓	$\checkmark$

\*Kynar® valves cannot be ganged or flanged

\*Stainless steel valves are not available in full shut-off or low pressure options \*Ganged valves cannot be flanged and are not available with Kynar® coating  $^{*}$ Full shut-off valves are not available with Kynar® coating  $^{*}$ Flanged valves cannot be ganged

