



® Knowledge Beyond Measure.

Fume Hood Controller

Model FHC50



Fume hoods are a primary source of protection in laboratories.

Face velocity measurements are often used to gauge the performance of a fume hood's ability to contain and exhaust harmful vapors. By measuring and controlling face velocity, TSI FHC50 Fume Hood Controllers provide a higher level of fume hood safety and energy efficiency.

Features and Benefits

- Controls fume hood face velocity to provide containment and safety
- Reduces laboratory air flow usage, optimizing energy savings
- Assists in managing risk by communicating fume hood status information to Building Management System (BMS)
- Visual, audible and remote alarms warn users of unsafe conditions
- Seamless integration to BMS via BACnet®, LonWorks®, or Modbus™
- Easy installation and wiring
- Fast-acting actuator provides containment during sash movements
- Easy configuration using keypad or configuration software
- Large display provides detailed fume hood information
- Surface or flush mount options available

Applications

- Research Laboratories
- Life Science and Pharmaceutical
- Universities and Academic
- Vivariums
- Healthcare Facilities

Options

- Fume Hood Control
 - Using side-wall velocity sensors
 - Utilizing sash sensors
 - Combining side-wall and sash sensors
- Flow Control
 - Using pressure-based or thermal flow stations
 - Utilizing linear venturi valves
- Controls dampers or valves with fast-acting actuator, depending on application



Specifications

Fume Hood Controller

Model FHC50

Display Range

0 to 1,000 fpm (0 to 5.08 m/s)
0 to 10,000 cfm (0 to 4,720 l/s, 0 to 16,990 m³/hr)

Low Alarm Range

5 to 960 fpm (0.03 to 4.88 m/s)
0 to 10,000 cfm (0 to 4,720 l/s, 0 to 16,990 m³/hr)

High Alarm Range

80 to 1,000 fpm (0.41 to 5.08 m/s)
0 to 10,000 cfm (0 to 4,720 l/s, 0 to 16,990 m³/hr)

Control Output

0-10 VDC

Analog Outputs

0-10 VDC or 4-20 mA
Represents Face Velocity, Flow Rate, or % Sash Open

Alarm Contact Outputs

SPST, 2A @ 30 VDC Nominal

Contact Inputs

Sash Position, Night Setback, Emergency, Flow

Communication Options

Modbus, N2, BACnet MS/TP, LonWorks

Input Power

24 VAC, 50/60 Hz or 15-40 VDC 5, Watt Maximum
(50 VA for system with TSI actuator)

Operating Temperature

32 to 120° F (0 to 48.9° C)

Size (H x W x D)

6.67" x 2.92" x 1.25" (16.9 cm x 7.4 cm x 3.2cm)

Weight

0.5 lb (225 g)

Optional Accessories

800920 Slimline Monitor
800926 Flush Mounting Bracket

	FHC50-01	FHC50-02	FHC50-03	FHC50-04
TSI's Sidewall Velocity Sensor	■		■	
Sash Position Sensor		■	■	
Flow Control				■
Damper Control	■		○	○
Venturi Valve Control	■	■	■	○
Visual and Audible Alarms	■	■	■	■
Flow Input	○	■	■	■
Contact Inputs	C	C	C	C
Analog Outputs	C	C	C	C
Alarm Contact Outputs	■	■	■	■
RS-485 (Modbus, Johnson N2)	■	■	■	■
BACnet MS/TP or LonWorks Compatible	○	○	○	○

■ = Feature of Instrument
○ = Optional versions available
C = Configurable - see manual for options

Specifications are subject to change without notice.

TSI and the TSI logo are registered trademarks of TSI Incorporated in the United States and may be protected under other country's trademark registrations.

Modbus, LonWorks, and BACnet are registered trademarks of Modicon Inc., Echelon Corp., and ASHRAE respectively.



Knowledge Beyond Measure.

TSI Incorporated - Visit our website www.tsi.com for more information.

USA Tel: +1 800 874 2811 India Tel: +91 80 67877200
UK Tel: +44 149 4 459200 China Tel: +86 10 8219 7688
France Tel: +33 1 41 19 21 99 Singapore Tel: +65 6595 6388
Germany Tel: +49 241 523030