## degree controls, inc.

Your Partner for Airflow Sensing & Controls

# Rooster™ Monitor100

#### Applications

- Chemical Fume Hoods
- Laminar Flow Hoods
- Biosafety Cabinetry
- HVAC Duct Monitoring
- Clean Room Monitoring
- Building Management
- Critical Containment

#### Degree Controls, Inc.

is an ISO-9001 certified, world-class designer and manufacturer of airflow sensing, monitoring, and control solutions. With over 20 years of proven experience, we pride ourselves on delivering solutions which provide the value, differentiation, and service required by our customers, to meet the rapidly changing competitive landscape that they face.

#### Degree Controls, Inc. 18 Meadowbrook Dr. Milford, NH 03055

603.672.8900 or 1.877.334.7332 sales@degreeC.com www.degreeC.com

#### Overview

The Rooster<sup>™</sup> Monitor100 is the next-generation airflow monitor for chemical fume hoods. With a glove-friendly, color touch-screen and onscreen messaging, the Monitor100 is intuitive and requires virtually no training. Using temperature compensated, Degree Controls' instrumentationclass air velocity sensing, calibration is faster, more accurate, and more reliable.

Built according to industry feedback, users will find they do not need to continually refer to a manual to operate. The GUI guides the operator through procedures with on-screen instructions. Users can also add laboratory specific information, such as Safety Officer phone numbers and unique asset tags via the built-in USB port. To future proof your investment, firmware updates are achieved by simply plugging in a USB memory stick and power cycling the unit.

Single and multiple event alarms are clearly displayed to the user, and the INFO button allows instant access to calibration date, alarm thresholds, and other critical system information. The Monitor100 conveys status by updating the background color of the screen and critical safety alarms are augmented with a blinking LED. Dual password protection allows users to personalize operational experience, but not override safety features set by facility managers.

Powered by supplied wall adapter or 24VDC/VAC cabinet supply, the Monitor100 uses two flow-through sensor types, which may include a removable, and washable air screen. Sophisticated controls include, sash alarm, night setback, remote signaling, latching and ring-back control, display resolution, and unit of measure updates.



#### Specifications

Rooster™ Module Size	3.2" x 5.3" x 0.7" (81mm x 135mm x 19mm)
LCD Display Area	2.3"x 2.7" (57mm x 70mm)
Air Velocity Range	30-2,000 fpm (0.15 - 10.0 m/s)
Velocity Repeatability	1% (NSF49:2014 Requirement)
Response Time	< 1 second
Supply Voltage	24 VAC/VDC & Wall Adapter
Red LED Indicator	160° viewing angle
Alarm Volume	0 - 85dB (adjustable)
Relative Humidity	5 - 95% (non-condensing)
Operating Temperature	40°F - 140°F (5°C - 60°C)
Storage Temperature	-40°F - 185°F (-40°C - 85°C)
Compliance Standards	CE, RoHS



#### Features

- Glove-friendly, color touch panel display, with complete user messaging and intuitive interface.
- Whole-screen background colorization to convey current state, augmented by flashing red LED while in alarm state.
- Instrumentation-class sensor, compatible with latest 2014 NSF requirements for repeatability and high accuracy calibration.
- Accepts side-flow sensor for negatively pressurized cabinets, insertion probe for exhaust ducts and inline retrofit design to replace legacy airflow alarm monitors.
- Full temperature compensation built-in for accuracy across wide operating temperature range.
- Air temperature sensing included and displayed on-screen.
- Wide velocity range capability, for use in face-velocity or duct-velocity applications.
- Fast and intuitive set-up, with no need to have manual on hand.
- Dual password protection allows users to personalize operational experience, but not override safety features set by facility managers.
- On screen messaging, to alert multiple simultaneous alarms, and real-time latching/mute conditions.
- INFO button for instant access to calibration date and current system configuration.
- Power fail protection to retain settings in case of power mains failure.
- Output relays for remote monitoring of airflow alarms, sash alarms, and remote night setback initiation.
- Night setback airflow settings to manage laboratory air exchange using your chemical fume hood your most energy efficient option.
- USB keyboard compatible, for user based information, and alphanumeric asset tagging.
- USB port for firmware upgrades to future-proof your investment.

## Input/Output Available

Inputs - Night Setback and Optional Sash Switch Outputs - Airflow Alarm and Sash Alarm

Please refer to the manual for further information.

#### Customizations Available

- Analog output scaled to air velocity readings
- Private labeling
- Custom boot-up screen with logos or special information Call DegreeC to discuss available customizations!

## Part Number Format

#### TC62310-S-B

- S = Sensor Selection
- 1 = Side-flow Sensor
- 2 = In-line Sensor
- 3 = Duct Mounted Probe Sensor

#### B = Mounting Plate Option

- 1 = Wall Mount Option
- 2 = Semi-Flush Mount Option

Optional Sash Switch available: Part # 62310AS004

### Monitor Mounting Options

The Monitor100 is mounted in two steps. First, the backplate is mounted to the cabinet or electrical box, and the wires are pulled through and connectorized. The connectors are plugged into the Monitor100 and the front bezel assembly snaps onto the backplate with no tools.

#### Sensor Mounting Options

- Side-flow sensor is designed to be mounted to the exterior surface of the cabinet, and can be used with the supplied ducting to create an airflow path from the front face, to the inside face of the cabinet. Includes removable and washable air screen.
- In-line sensor is designed for retrofit of failed legacy products, or those which are no longer accurate enough for new standards. The inline sensor is mounted inside the cabinet plenum area to increase the tamper-resistance of the sensor element. It can be used with the washable filter from the Sidewall sensor.
- Duct Mounted Probe Sensor Use in exhaust flow for Class II A or B duct systems. Each Rooster sensor comes with a Quick Start Guide and all the hardware you need.





Wall Mount Option

Semi-Flush Mount Option

INSTRUMENTS



