

Continuous monitoring of critical areas

Model R5813/R5815 High Flow Remote Counters

FEATURES

- Long Life Laser technology for superior performance
- 0.3 micron (R5813)
0.5 micron (R5815)
- 1.0 cfm flow rate
- 2 size channels
- Stainless steel case
- RS-485 communications

APPLICATIONS

- Cleanroom Monitoring
- Inert Gas Sampling
- Loadlock Profiling



Met One's Model R5813 and R5815 remote counters provide the high flow rate of 1.0 cfm (28.3 L/min) and the sensitivity of 0.3 microns. For years, the Met One Model R4800 family has provided remote sensors at 0.1 cfm for continuous monitoring at an economical cost. With an improved high flow rate and sensitivity, the Models R5813 and R5815 provide additional capabilities for continuous monitoring of critical areas. Plus, breakthrough Long Life Laser technology extends the average service life of the instrumentation's laser to more than ten years. Remote counters are used in conjunction with a Facility Monitoring System (FMS) to provide 24-hour monitoring of critical areas. This means it is possible to provide immediate operator feedback concerning particle events, improving production efficiency and minimizing time and waste.

Models R5813 and R5815 use RS-485 serial communications, allowing daisy-chained wiring between particle counters using only a single pair of wires. This RS-485 cable can be up to 4000 feet (1220 meters) from the computer to the last counter.

A user-programmed alarm contact is provided. When high counts trigger an alarm, the LED on the counter flashes and an alarm signal is set at the connector. The alarm automatically resets at the beginning of the next count cycle. Flow control is measured by critical orifice. For improved statistical sampling in cleanrooms, choose the Model R5813/R5815 particle counters with high flow rate.

Model R5813/R5815 Remote Particle Counters

SPECIFICATIONS

| | | | |
|----------------------|---|---|----------|
| Size Channels (µm) | R5813 | Ch 1/Ch 2 | 0.3, 0.5 |
| | R5815 | Ch 1/Ch 2 | 0.5, 5.0 |
| Flow Rate | 1.0 cfm (28.3 L/min) | | |
| Vacuum Level | Minimum 18" Hg (450 mbar) | | |
| Data Output | RS485 | | |
| Flow Control | Critical orifice, requires 18" Hg (450 mbar) vacuum minimum | | |
| Light Source | Laser diode (10-year MTTF) | | |
| Coincidence Loss | 5% at 400,000 particles/ft ³ | | |
| False Count | Not more than one count in 5 minutes | | |
| Inlet Pressure | Ambient to 0.1" Hg vacuum | | |
| Indicators | Power and Sensor/Alarm LEDs | | |
| Power | 12 to 28 VDC at < 300 mA | | |
| Connector | DB-15 (female) for both DC power and data | | |
| Dimensions | 6.9" w x 4.3" h x 5.1" d (17.5 x 11 x 13 cm) | | |
| Weight | 4.5 lbs (2 kg) | | |
| Port Sizes | 1/4" I.D. sample inlet 1/4" I.D. vacuum connection | | |
| Environment | Operating | 55 to 84°F (12 to 29°C) 20 to 95% relative humidity, non-condensing | |
| | Storage | -40 to 160°F (-40 to 70°C) up to 98% relative humidity, non-condensing | |
| Accessories Included | Isokinetic Probe; DB-15 Connector; Operator's Manual | | |

ORDERING GUIDE

When ordering, specify: 0.3 µm (R5813) or 0.5 µm (R5815)

OPTIONAL ACCESSORIES

Switching Power Supply
Isokinetic Probes for 1.0 cfm
Wall Plates for Vacuum/DC Power
Sample or Vacuum Tubing
Particle Vision® Online Software
CIMScan® Software

