MET ONE R4903/R4905 Remote Airborne Particle Counter

Features

- Long Life Laser™ technology for superior performance
- 0.3 µm (R4903) or 0.5 µm (R4905) at 0.1 CFM
- 2 size channels
- 4–20 mA output
- Delayed alarm

Applications

- Cleanroom monitoring
- Inert gas sampling
- Mini-environment monitoring

Connecting remote particle counters to your SCADA system has never been easier than with MET ONE's Model R4903 and R4905 miniature particle counters.

Small, reliable sensor for multiple remote process areas

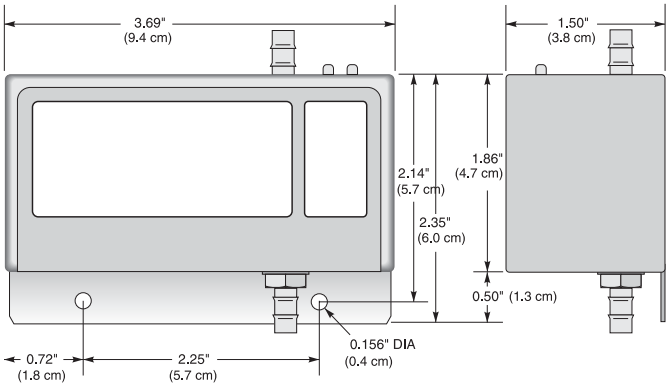
Connecting remote particle counters to your SCADA system has never been easier than with MET ONE's Model R4903 and R4905 miniature particle counters. Their small size allows them to be mounted much nearer to critical monitoring areas at many locations around the cleanroom by simply providing a vacuum source, DC power and a communication line. Plus, breakthrough Long Life Laser technology extends the average service life of the instrumentation's laser to more than ten years.

The R4903 and R4905 uses the industry standard 4–20 mA interface. Loop current is driven by voltages between 15 and 30 VDC. The sensors use an RS-485 serial interface for programming count time, hold time, alarm level, alarm delay, and scaling for the 4–20 mA output. The programming is retained through power off and on cycles.

A user-defined alarm level can be set for high counts on channel one. When high counts trigger an alarm, the LED on the counter flashes and an alarm signal is set at the connector. The alarm can be set to trip after the level is exceeded the first time or after the second through ninth time counts exceed the level. The alarm automatically resets at the start of the next count cycle.

Specifications

Size Channels (µm)	Ch 1/Ch 2	0.3, 0.5 (R4903)
	Ch 1/Ch 2	0.5, 5.0 (R4905)
Flow Rate	0.1 CFM (2.83 LPM)	
Flow Control	Critical orifice; requires 18" Hg vacuum, minimum 450 mbar	
Light Source	Laser diode (10-year MTTF)	
Coincidence Loss	5% at 2,000,000 particles/ft^3	
Inlet Pressure	Ambient to 0.1" Hg vacuum	
Indicators	Power LED illuminates when counter is powered;	
	Calibration/Alarms LED illuminates when sensor calibration needs checking and flashes when the count exceeds the alarm level.	
Power	6 VDC (± 10%) at < 125 mA	
Loop Supply	15 to 30 VDC	
Output	2 size channels; 0 mA on sensor fail or no power	
Alarm Output	Open collector FET maximum sink current (on) 150 mA;	
	Maximum VC voltage (off) 30 VDC	
Connector	DB-15 (female)	
Weight	0.3 kg (10.7 oz)	
Tubing Connections	Inlet, 0.1 CFM, 1/8" I.D.	
	Inlet, 1.0 CFM, 1/4" I.D.	
	Outlet, All (vacuum), 1/4" I.D.	
Environment	Operating	12 to 41°C (55 to 105°F)
		20 to 95% relative humidity, non-condensing
	Storage	-40 to 70°C (-40 to 160°F)
		up to 98% relative humidity, non-condensing
Accessories Included	Isoprobe; DB-15 Connector; Operator's Manual	
When ordering, specify	0.3 µm (R4903) or 0.5 µm (R4905)	
Optional Accessories	Switching Power Supply	
	Power Adapter	
	Ultra Vision Online Software	
	Particle Vision Online Software	



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