



ENGLISH

## Datasheet

Stock No. 146-4657

RS-5200

## PARTICLE MASS COUNTER



**The meter is commonly used for the following:**

- HVAC Applications
- Controlled Environments
- Filter Testing
- Indoor Air Quality
- Mining & Ore Processing
- Hospitals & Clinics
- Emission Sourcing
- Monitoring Growing Rooms

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## SPECIFICATIONS

<b>Operating principle</b>		Counts individual particles using scattered laser light and calculates the equivalent mass concentration using a proper algorithm.
<b>Optical system</b>		Sideway light-scattering method
<b>Light source</b>		Laser diode
<b>Laser product class</b>		Class 1, IEC 60825-1 / EN 60825-1
<b>Mass Mode</b>	<b>Mass concentration ranges</b>	PM1, PM2.5, PM4, PM7, PM10, and TSP
	<b>Concentration range</b>	0 to 1000 µg/m <sup>3</sup>
	<b>Sample time</b>	1 minute (2.83 L / min)
<b>Count Mode</b>	<b>Particle size</b>	0.5 µm, 0.7 µm, 1.0 µm, 2.5 µm, 4.0 µm, 5.0 µm, 7.0 µm, 10 µm
	<b>Accuracy</b>	±10% to calibration aerosol
	<b>Sensitivity</b>	0.5 µm
	<b>Sample flow rate</b>	2.83 L / min
	<b>Maximum particle concentration</b>	70000 particles / L (coincidence loss max. 5%)
	<b>Sample time</b>	6 s. (0.01 CF), 21 s. (1L), 1 min. (0.1 CF, 2.83L), 3 min. 32 s (10L), 10 min. (1 CF, 28.3L), any length (MANUAL), any length (1 s. to 59 min. 59 s.)
<b>Relative humidity</b>		± 7 %, 20 % RH to 90 % RH, non-condensing
<b>Temperature</b>		± 3 °C, 10 °C to 40 °C (50 °F to 104 °F)
<b>Data storage (Flash memory)</b>		500 sample records (rotating buffer) in Mass mode. 500 sample records (rotating buffer) in Count mode.
<b>Data recorded</b>		Date, time, counts, relative humidity, temperature, sample volumes, alarms, label
<b>Display</b>		TFT color display with backlight
<b>Count modes</b>		Concentration, totalize, audio
<b>Delay time</b>		0 to 24 hours
<b>Sample inlet</b>		Isokinetic probe
<b>Interface</b>		USB
<b>Vacuum source</b>		Internal pump flow controlled
<b>Dimensions</b>		11.0 x 21.8 x 6.7 cm (4.33 " x 8.58 " x 2.64 ")
<b>Weight</b>		875 g
<b>Environmental:</b>		
<b>Operating Storage</b>		10 °C to 40 °C (50 °F to 104 °F), 20 % to 90 % RH, non-condensing -10 °C to 50 °C (14 °F to 122 °F), Up to 90 % RH, non-condensing
<b>Power</b>		AC Adapter, 12 VDC at 3 A, 100 to 240 VAC, 50 to 60 Hz
<b>Rechargeable Battery</b>		Lithium ion, 8.4 V at 2.5 Ah; replaceable
<b>Charge time</b>		2.5 hours (Fast Charge mode), 27 hours (Trickle Charge mode)
<b>Continuous Operating Time</b>		4 hours
<b>Standards</b>		Complies with CE, JIS B9921: 1997, ISO 21501-4
<b>Accessories</b>		Instruction manual, AC adapter, Power cord, USB cable, Zero count filter, Hard-shell carrying case.