

# **SPECIFICATIONS**

Facility Monitoring Particle Counter

**KR-02C**



3-20-41 Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan

# Outline

This unit is a facility monitoring particle counter designed for remote monitoring in environments where air purity is highly critical. It is suitable for use in clean rooms and for managing clean room manufacturing facilities.

The unit incorporates an interface for the proprietary Rion multi-point monitoring system which allows connection to a computer or other equipment for external measurement control and sending of measurement data. An alarm output function is also provided which can be used to control an external alarm device or other piece of equipment.

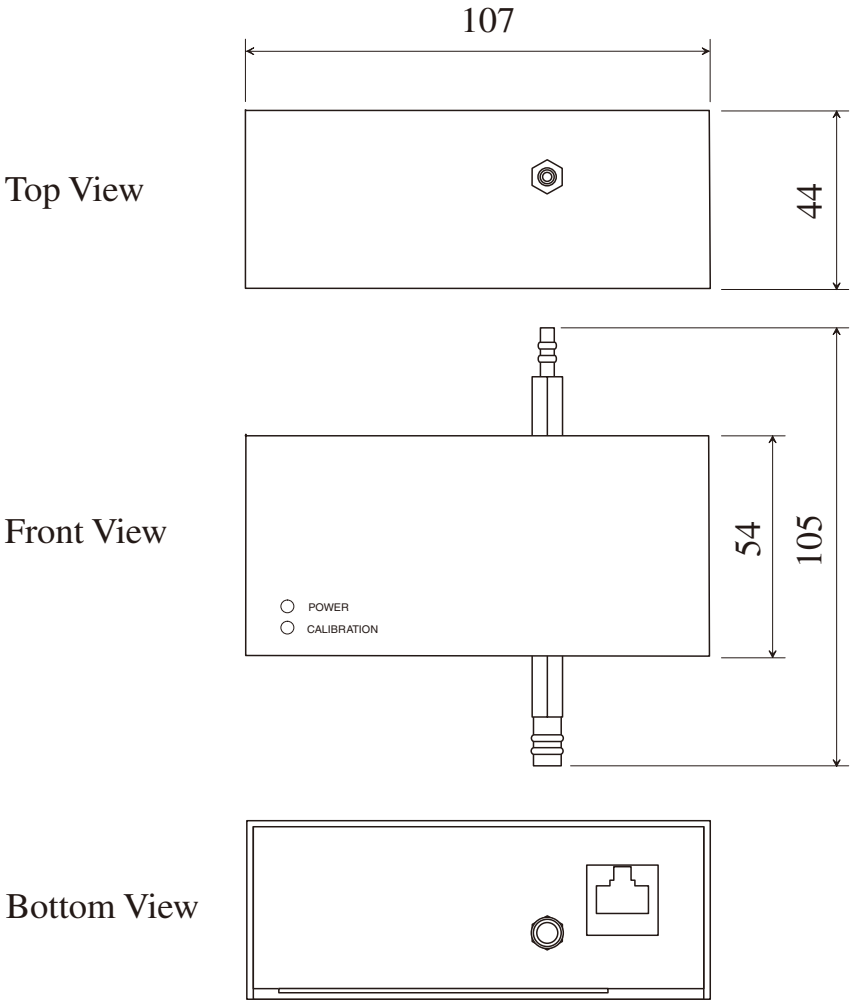
The unit detects particles in two channels, with channel 1 being for particles of sizes  $\geq 0.3 \mu\text{m}$  and channel 2 for particles of sizes  $\geq 0.5 \mu\text{m}$ . The results are output via the multi-point system interface.

Because this unit does not include a power supply, pump, and display, these functions must be provided through connection to external equipment.

# Specifications

Optical system	90° sideway light-scattering method
Light source	Laser diode: wave length 790 nm, maximum output 50 mW
Laser product classification	Class 1, IEC 60825-1 (2001)
Light detector	Photodiode
Minimum particle size	0.3 $\mu\text{m}$ (for particles with refractive index 1.6)
Measurement size ranges	Channel 1: 0.3 $\mu\text{m}$ and above Channel 2: 0.5 $\mu\text{m}$ and above
Flow rate	2.83 L/minute
Maximum particle number concentration	70,000 particles/L (coincidence loss within 5%)
Sample flow control	Via critical orifice of connected vacuum source with max. -60 kPa (gauge pressure)
Indicators	POWER, CALIBRATION LEDs

Interface	For Multi-point monitoring system	
Connector	RJ-45	
Alarm	Electrical characteristics of output signal conforms to EIA RS-422 standard (max. drive current: 10 mA)	
Tube connectors		
Inlet	Outer diameter 1/8 inch (approx. 3.18 mm)	
Outlet	Outer diameter 1/4 inch (approx. 6.35 mm)	
Power requirements	9 to 28 V DC (max. 100 mA at 24 V)	
Ambient conditions for operation	+10 to +40°C, 20 to 95% RH (no condensation)	
Ambient conditions for storage	-10 to +50°C, max. 98% RH (no condensation)	
Dimensions	105 (H) × 107 (W) × 44 (D) mm (maximum)	
	54 (H) × 107 (W) × 44 (D) mm (without protruding parts)	
Weight	Approx. 350 g	
Supplied Accessories	Instruction manual	1
	Inspection certificate	1



Unit: mm

Dimensional Drawings

Specifications subject to change without notice