

SPECIFICATIONS

PARTICLE SENSOR

KA-80B



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

Outline

The particle sensor KA-80B is designed for use in a multi-point monitoring system to monitor the concentration of airborne particles in clean rooms or other controlled environments. Air is sampled continuously from the monitored environment, and particles are monitored, using the light-scattering method. The rated sample air flow is 1 liter per minute, and the minimum measurable particle size is 0.3 μm . In the standard configuration, two size ranges, 0.3 μm and over and 0.5 μm and over, are available. A factory-installed option allows five size ranges: 0.3 μm and over, 0.5 μm and over, 1 μm and over, 2 μm and over, 5 μm and over.

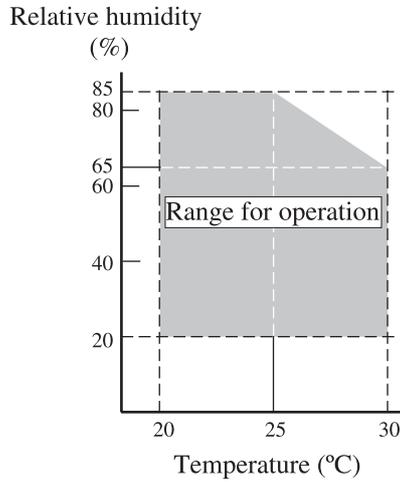
- * All company names and product names mentioned in this specifications are trademarks or registered trademarks of their respective owners.

Specifications

Optical system	70° sideway light-scattering method
Light source	Laser diode (rated output 40 mW; wavelength 780 nm)
Laser product classification	Class 1, IEC 60825-1 (2001) Internal particle detection mechanism uses class 3B laser
Light detector	Photodiode
Sample flow rate	1 L / min
Minimum particle size	0.3 μm (with particles of refractive index 1.6 in clean air)
Measurement size range	Two channels ($\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$) (5 channels in optional configuration: $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 1 \mu\text{m}$, $\geq 2 \mu\text{m}$, $\geq 5 \mu\text{m}$)
Maximum particle concentration	60,000 particles / L (coincidence loss within 5%)
Connector	
DATA LINK	Interface for multi-point monitoring system

Ambient conditions for operation

Shaded section  in the following graph
(without drastic fluctuations during operation)



Ambient conditions for storage

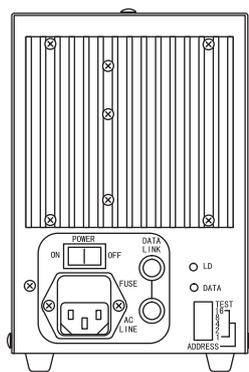
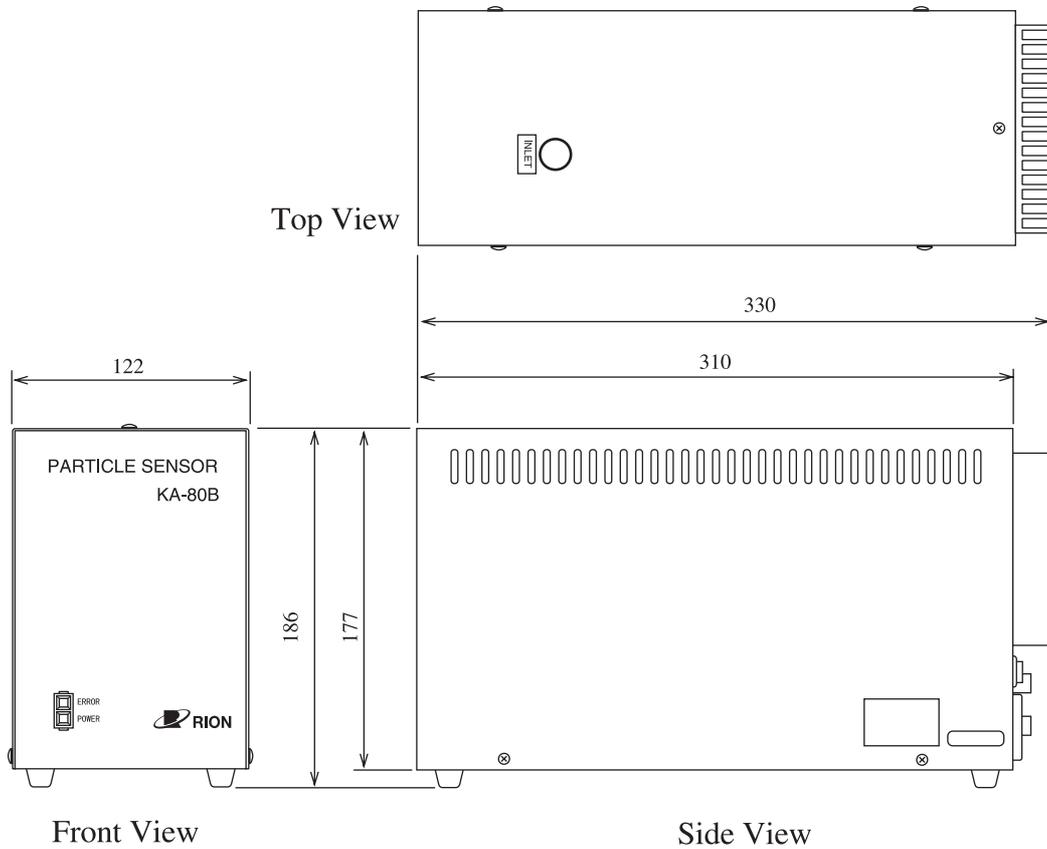
-10 to +50°C, less than 85% RH (no condensation)

Power requirements 100 V AC \pm 10%, 50 / 60 Hz, approx. 35 VA

Dimensions 186 (H) \times 122 (W) \times 330 (D) mm (maximum)
177 (H) \times 122 (W) \times 310 (D) mm (excluding protruding parts)

Weight Approx. 4.5 kg

Supplied Accessories	Sampling pipe	1
	Sampling tube (2 m)	1
	Power cord (2.5 m)	1
	Slow-blow fuse (0.4 A)	1
	Instruction manual	1
	Inspection certificate	1



Rear View

Unit: mm

Dimensional Drawings

Specifications subject to change without notice