



# Airborne Particle Counter **KC-22B**

**0.08  $\mu\text{m}$ , optimal for  
hard disk or spindle motor dust inspections**



- Compact and lightweight, high output, uses optical system with excellent stability
- Diode pumped solid state laser assures exceptional durability
- Equipped with RS-232C interface as standard, enabling automatic computer measurement
- Printer output of measurement results is possible (Printer available as option)

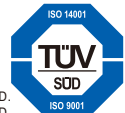
## Specifications [KC-22B]

Optical system	Light-scattering method
Light source	Diode pumped solid state laser (wavelength 1064 nm), open-cavity type
Laser diode	Wavelength 800 nm, rated output power 1 W
Laser medium	Nd: YVO4
Laser product class	Class 1, IEC 60825-1: 2001
Light detector	Photodiode
Air flow method	Purified sheath air envelops sample air coaxially
Flow rate	300 mL/min
Calibration	With polystyrene latex (PSL) particles (refractive index 1.6) in clean air
Minimum particle size	0.08 $\mu\text{m}$ (with PSL particles of refractive index 1.6)
Size range (5 channels)	$\geq 0.08 \mu\text{m}$ , $\geq 0.1 \mu\text{m}$ , $\geq 0.2 \mu\text{m}$ , $\geq 0.3 \mu\text{m}$ , $\geq 0.5 \mu\text{m}$
Maximum particle number concentration	100 000 particles/L (coincidence loss 5 %)
False countrate	One count or less per 5 minutes
Measurement modes	
Manual measurement mode	After being started, measurement continues until a stop command given
Automatic measurement mode	After being started, measurement continues for the preset measurement time
Measurement time	1 to 600 sec
HOLD	Measurement value retained until start of next measurement
REPEAT	After completion, measurement is automatically repeated after pause intervals of about 10 seconds
Numeric display	Particle count (max. 6 digits), alarm level setting, measurement time, protect, error
Input / Output connectors	
EXT terminal	Test I/O terminal
Alarm terminal	ALARM 1 terminals are shorted by relay contact when alarm occurs (max. contact load: 30V DC, 1 A) Alarm level: 1 to 1000 and alarm off
Serial terminal	RS-232C interface
Environmental conditions for operation	+15 °C to +35 °C, less than 85 % RH (no condensation)
Power	100 V to 240 V AC, 50/60 Hz, Approx. 90 VA
Dimensions and weight	185 (H) x 155 (W) x 330 (D) mm (excluding protrusions), Approx. 7 kg
Accessories	Sampling pipe x 1, Sampling tube (2 m) x 1 Filter x 1, Power cord (for use in Japan, 2.5 m) x 1

Factory options	D/A converter interface (KZ-25L) Outputs particle count of the selected channel converted to 4mA to 20 mA DC current Range: Selection of one of the following: 0 to 10, 0 to 100, 0 to 1 000, 0 to 10 000, 0 to 100 000 0 to 16, 0 to 256, 0 to 4 096, 0 to 40 960, 0 to 409 600
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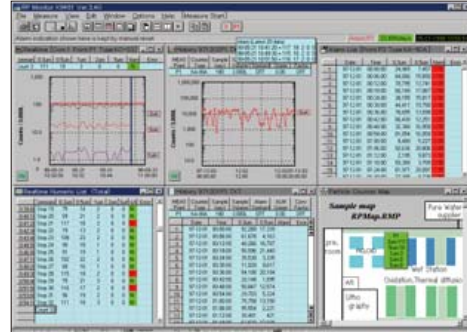
## RP monitor K9461 Ver. 2

Option

Enables automatic control of particle counter, data collection, real-time graph display, filing and printout using a computer

- Enables data processing using spreadsheet software (Windows Excel, etc.)
- Enables one-to-one control of RION particle counters in the RS-232C mode

Compatible OS: Microsoft Windows 2000/XP



Sample display

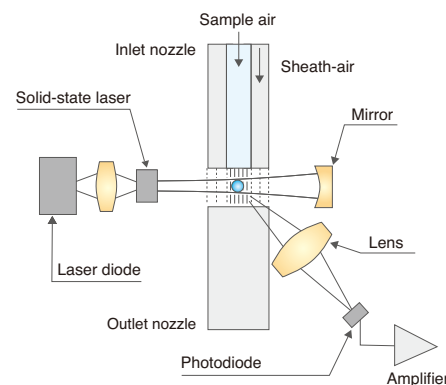
## Printer KP-06

For unattended measurement data recording, measurement, management and control

- Enables max. 99 repeated measurements and printing of the average values
- Enables printing of particle size range total and single values in max. 6 channels
- Compatible with lint-free thermo-sensitive recording paper
- Requires separate communication cable (CC-61, not included)



## Principle of sensor optical system



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