



RION



CE

Liquid-Borne Particle Sensor

KS-19F

For Chemical HF 0.03 μm



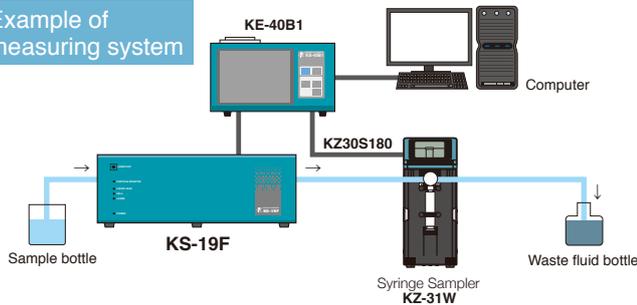
Liquid-Borne Particle Sensor KS-19F

- Detects particles to 0.03 μm
- User can freely select particle size
Up to 10 channels from 0.03 μm to 0.13 μm
- Sapphire flow cell
- With abundant options, it can be used for both in-line and off-line measurement

Specifications [KS-19F]

Optical system	Light-scattering method
Light source	Diode pumped solid state laser (wavelength 532 nm, rated output 800 mW)
Laser product class	Class 1, IEC 60825-1
Light detector	Silicon photodiode
Materials of parts exposed to sample	Sapphire, PFA
Calibration	Polystyrene latex (PSL) particles with refractive index 1.6 in pure water
Size range	
Setting range	0.03 μm to 0.13 μm
Factory default (4 channels)	Freely settable 2 to 10 channels can be set with controller $\geq 0.03 \mu\text{m}$, $\geq 0.06 \mu\text{m}$, $\geq 0.1 \mu\text{m}$, $\geq 0.13 \mu\text{m}$
Flow rate	10 mL/min
Counting efficiency	5% \pm 1.5%
Maximum particle number concentration	40 000 particles/mL (coincidence loss is 10% or less)
Sample pressure range	300 kPa or less (gauge pressure)
Sample inlet / outlet	$\phi 2 \text{ mm} \times \phi 4 \text{ mm}$ flared joint for tube
Purge air port	One - touch type joint for $\phi 6 \text{ mm}$ tube
Input / output connectors	
CONTROLLER	For connection of KE-40B1
LIQUID LEAK ALARM	Alarm output terminal shorted during normal operation, connector open when internal leak is detected
Environmental conditions for operation	15 °C to 35 °C, less than 80 %RH (no condensation)
Power	DC12 V (supplied from KE-40B1)
Dimensions and weight	170 mm (H) x 487 mm (W) x 310 mm (D) (excluding protruding parts), approx. 13.5 kg
Supplied Accessories	Tube A vacuum pack x 1 ($\phi 2 \text{ mm} \times \phi 4 \text{ mm}$, Flared PFA tube 1.5 m x 2, union joint x 1), Connection cable A (1 m) x 1
Option	Connection cable (2 m) KS-42-126

Example of measuring system



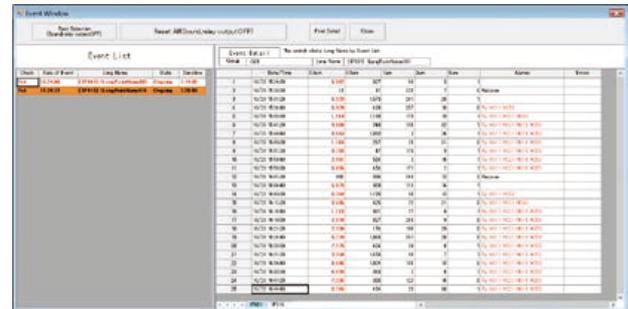
RP Monitor Evo10 K1701 Ver.2

Option

Used for controlling particle counters to regulate the start/end of measurement and turn the light source/built-in pump on and off. Measurement time, period, number of measurements, alarm, and conversion settings

- Allows control of up to 8 particle counters in serial mode, using 8 ports.

Operating system: Microsoft Windows 10 Pro 64 bit



Sample display

Syringe Sampler KZ-31W

For batch measurement of liquid-borne particle sensor.

*Connecting cable (KZ30S180, option)



For operation control of particle sensor and display of measurement data

Controller KE-40B1

- Particle size range can be freely set for up to 10 channels.
 - Built-in printer.
- Measurement data can be stored on memory card (CF card).



Specifications [KE-40B1]

Display	
Display items	Particle size range (max.10 channels), Count (max. 8 digits)
Controls	Touch panel, Sheet switches
Measurement	
Measurement time	10 seconds to 2 hours, or manual
Measurement modes	Manual measurement Automatic measurement: mean value measurement, moving average measurement, periodic measurement, scheduled time measurement
Alarm	When measured value in a selected channel reaches the preset alarm level, a buzzer sounds and alarm terminals are shorted by relay contacts Maximum connected load: DC 30 V, 1 A
Communication	RS-232C
Printer	Printout of measurement results, date and time
Recording paper	Thermal paper: TP-08, Clean thermal paper: TP-10
Memory	CompactFlash (CF) card® (automatic storage in TSV format)
Power	100 to 240 V AC, 50/60 Hz, approx. 130 VA
Dimensions and weight	140 (H) x 240 (W) x 146 (D) mm (excluding protruding parts), approx. 3 kg
Accessories	Power cord x 1, Thermal paper TP-08 x 2 rolls, Dummy card
Options	Communication cable CC-61A/63A, Thermal paper TP-08, Lint-free thermal paper TP-10, Memory card MC-25CF2 (256 MB), CFcard adapter CFC-ADP03
Factory option	D/A converter interface KE-40-S06

*Use only RION supplied cards for assured operation.

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