RION

ECO GREEN

Liquid-Borne Particle Sensor

High sensitivity allows measurement of 0.04 µm particles in liquid

Liquid-Borne Particle Sensor

KS-18FX

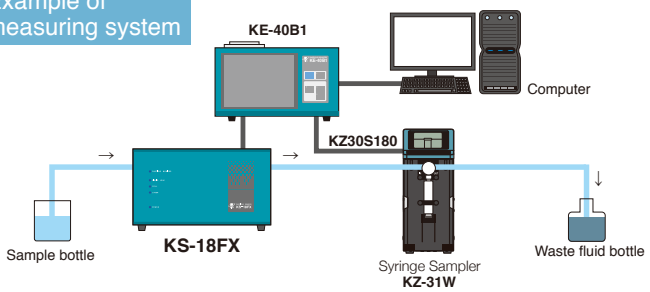
- Detects particles down to 0.04 μm size, at a flow rate of 10 mL/min
- User selectable particle size range up to 10 channels within measuring range using KE-40B1
- Integrated leak sensor with alarm output
- Sapphire flow cell

Specifications [KS-18FX]

Optical system	Light-scattering method
Light source	Diode pumped solid state laser (rated output 500 mW, wavelength 532 nm)
Laser product class	Class 1, IEC 60825-1
Light detector	Silicon photodiode
Materials of parts exposed to sample	Sapphire, PFA
Allowable sample fluid type	Fluids which do not corrode the fluid contact materials
Calibration	Polystyrene latex (PSL) particles with refractive index 1.6 in pure water
Size range	
4 channels (factory default)	≥0.04 μm, ≥0.08 μm, ≥0.1 μm, ≥0.15 μm
User selectable channels	1 to 10 channels
Setting range	0.04 μm to 0.15 μm
Flow rate	10 mL/min
Counting efficiency	3 %
Maximum particle number concentration	30 000 particles/mL (coincidence loss 10 %)
Sample pressure range	300 kPa (gauge pressure) or less
Sample inlet / outlet	ϕ2 mm x ϕ4 mm. flared joint for tube
Purge air port	One - touch type joint for dia. 6 tube
Input / output connectors	
CONTROLLER	Connection to KE-40B1
LIQUID LEAK ALARM	Relay contacts
Environmental conditions for operation	15 °C to 30 °C, less than 80 %RH (no condensation)
Power	DC12 V (supplied from KE-40B1)
Dimensions and weight	147 (H) x 272 (W) x 442 (D) mm (excluding protruding parts), approx. 12 kg
Supplied Accessories	Tube A vacuum pack x 1 (ϕ2 mm x ϕ4 mm. PFA tube with flared joint at one end, 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



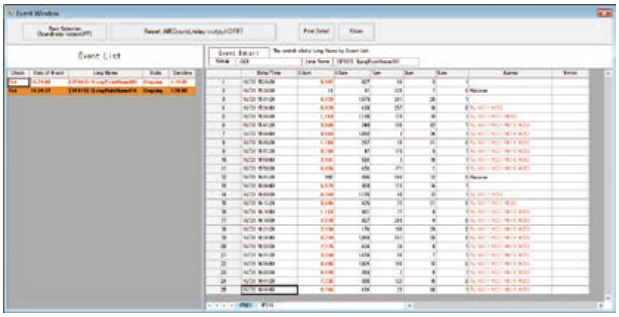
RP Monitor Evo10 K1701 Ver.2

Option

Used for controling 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).

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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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