

Compatible with a wide range of measurement of various particle sizes and types



**NEW**

# Liquid-borne Particle Sensor KS-42C

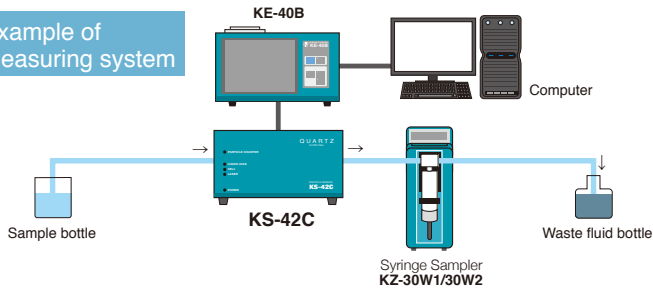
- Minimum particle size of  $0.5 \mu\text{m}$ , sample flow rate of 10 mL/min
- Particle size range (7 channels, factory default setting)  
 $\geq 0.5 \mu\text{m}$ ,  $\geq 1.0 \mu\text{m}$ ,  $\geq 2.0 \mu\text{m}$ ,  $\geq 3.0 \mu\text{m}$ ,  $\geq 5.0 \mu\text{m}$ ,  
 $\geq 10 \mu\text{m}$ ,  $\geq 20 \mu\text{m}$ ,
- Leakage detector built-in  
Outputs alarm when internal leak detected
- Channel size change possible within range of sensor (using KE-40B)



**Specifications [KS-42C]**

Optical system	Light-scattering method
Light source	Laser diode (wavelength 780 nm, rated output 5 mW)
Laser product class	Class 1, IEC 60825-1 : 2001
Light detector	PIN type photodiode
Materials of parts exposed to sample fluid	Synthetic quartz, PFA, PTFE
Allowable sample fluid types	Any liquid that does not corrode contacting materials
Calibration	Polystyrene latex (PSL) particles (refractive index 1.6) in pure water
Particle size range	
7 channels (factory default setting)	$\geq 0.5 \mu\text{m}$ , $\geq 1 \mu\text{m}$ , $\geq 2 \mu\text{m}$ , $\geq 3 \mu\text{m}$ , $\geq 5 \mu\text{m}$ , $\geq 10 \mu\text{m}$ , $\geq 20 \mu\text{m}$
Arbitrary setting	Arbitrary setting from 1 channel to 10 channels. Setting is done by the controller
Setting range	0.5 $\mu\text{m}$ to 20 $\mu\text{m}$
Counting efficiency	70 % to 110 %
Sample flow rate	10 mL/min
Maximum particle number concentration	1 200 particles/mL (at 5 % coincidence loss for 0.5 $\mu\text{m}$ particles)
Allowable sample fluid pressure	300 kPa (gauge pressure) or less
Sample fluid connector	Sample inlet/outlet: 2 (dia.) x 4 (dia.) flared joint for tube
Purge connector	Rc1/8 (1/8 PT female screw)
Input/output connector	
CONTROLLER connector	Connecting to KE-40B
LIQUID LEAK	Alarm output terminal shorted during normal operation open when internal leak is detected
ALARM connector	Alarm output terminal shorted during normal operation open when internal leak is detected
Power requirements	DC12 V (supplied by KE-40B)
Ambient conditions for operation	+15 °C to +35 °C, less than 80 % RH (no condensation)
Dimensions and weight	125 (H) x 240 (W) x 151 (D) mm (excluding protrusions), Approx. 3 kg
Accessories	Vacuum packaged tube A x1 (Two 2 (dia.) x 4 (dia.) PFA tubes 1.5 m long with one end flared, a union joint)

**Example of measuring system**

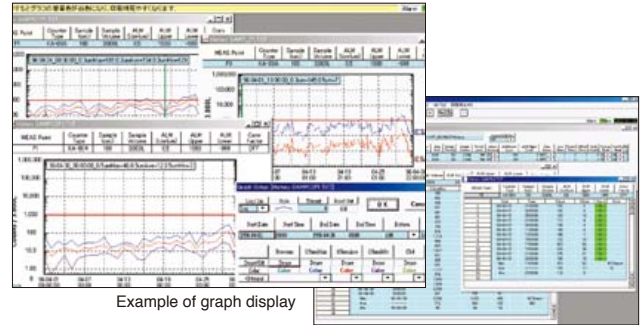


**RP monitor K9461 Ver. 2**

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



Example of graph display

Example of numeric list

**Syringe Sampler KZ-30W1/30W2**

For batch measurement of liquid-borne particle sensor

\*Connecting cable (KZ30S180, optional)



For operational control of particle sensor and display of measurement data

**Controller KE-40B NEW**

- Particle size range can be set arbitrarily up to 10 channels
- Printer is built in. Data can be stored in a memory card (CF card)



**Specifications [KE-40B]**

Display	
Display items	Particle size range (max.10 channels), Count (max. 8 digits)
Operating portion	Touch panel, Sheet switch
Measurement	
Measurement time	10 sec. to 2 h, and manually
Measurement mode	Manual measurement Automatic measurement: mean value measurement, Periodic measurement, Scheduled time measurement
Alarm	When a measured value of a selected channel reaches or exceeds the set alarm level, a buzzer sounds and alarm terminals shorted by means of relay contact 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	Compact flash (CF) card*(automatic storage in TSV format)
Power requirements	AC100 V to 240 V, 50/60 Hz, 75 VA
Dimensions and weight	140 (H) x 240 (W) x 150 (D) mm(excluding protrusions), Approx. 3.8 kg
Accessories	Power cord x1, Connecting cable (1 m) x1, Thermal paper TP-08 x2 rolls, Touch pen, Dummy card
Options	Communication cable CC-61A, Connecting cable (5 m) KE-40-125, Thermal paper TP-08, Clean thermal paper TP-10, Memory card(128 MB) MC-12CF1/(256 MB)MC-25CF1, CFcard adapter MC-CFADP
Factory option	D/A converter interface KE-40-S06

\*Use only RION supplied cards for assured operation.

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