Liquid-Borne Particle Sensor
KS-42D

2 µm to 100 µm Measurement Range Allows Monitoring of Coarse Particles

- Detects particles down to 2 µm size, at a flow rate of 25 mL/min
- Eight particle size ranges (8 channels, factory default setting)
  ≥2 µm, ≥3 µm, ≥5 µm, ≥7 µm, ≥10 µm,
  ≥25 µm, ≥50 µm, ≥100 µm
  (≥150 µm support available as option)
- Integrated leak sensor with alarm output
- User selectable channels within measurement range (using KE-40B1 function)
Specifications [KS-42D]

- Optical system: Light-obscuration method
- Light source: Laser diode (wavelength 780 nm, rated output 5 mW)
- Laser product class: Class 1, IEC 60825-1
- Light detector: Photodiode
- Materials of parts exposed to sample: Synthetic quartz, PFA, Perfluoro (fluorocarbon rubber)
- Allowable sample type: Fluids which do not corrode the fluid contact materials
- Calibration: Polystyrene latex (PSL) particles (refractive index 1.6) in pure water

Size range
- 8 channels (factory default)
- User selectable channels: 1 to 10 channels, setting made from Controller
- Setting range: 0.2 μm to 100 μm
- Count efficiency: 100 ± 20 %
- Flow rate: 25 mL/min

Accessories
- Connection cable (1 m) x 1
- Accessories: Tube A vacuum pack x 1

Environmental conditions for operation
- Sample pressure range: -80 to 300 kPa (gauge pressure)
- Maximum particle number concentration: 10 000 particles/mL (at 10 % coincidence loss for 10^8 channels)
- Size range

Materials of parts exposed to sample
- Connection cable (5 m)  KS-42-123, Sensor Stand KS-42-S39

Features
- Measuring system
- Example of measuring system

RP monitor EVO K0505 Ver. 2

- Used for controlling particle counters to regulate the start/stop of measurement and turn the light source/built-in pump on and off. Measurement time, period, number of measurements, alarm, and conversion settings.
- This software can monitor the same number of particle counters to serial ports when it is installed on a computer that can detect multiple serial ports (COM ports).

Syringe Sampler KZ-31W

- For batch measurement of liquid-borne particle sensor.
- Options: Connection cable (KZ30S180, option)
- Connection cable (KZ30S180, option)

Example of measuring system

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: Particles 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: Automatic measurement: mean value measurement, moving average measurement, periodic measurement, scheduled time measurement
- Alarms: When measured value in a selected channel reaches the preset alarm level, a buzzer sounds and alarm terminals are shorted by relay contacts

Communications
- 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: 110 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

Options
- Communication cable CC-61A, Thermal paper TP-08, Clean thermal paper TP-10, Memory card KS-30LC1 (256 MB), CF card adapter CFC-ADP03

Factory option
- D/A converter interface KE-40-S06

Distributed by:

RION CO., LTD.

http://www.rion.co.jp/english/

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

Tel: +81-423-59-7878, Fax: +81-423-59-7458