Liquid-Borne Particle Sensor
KS-41B

- Detects particles in photoresist down to 0.1 μm size (0.07 μm as Option*), at a flow rate of 5 mL/min
  * For measuring clear solutions such as UPW

- Particle size range
  Freely settable from 0.1 μm to 0.5 μm
  (up to 10 channels by KE-40B1)
  Factory default setting: five channels
  (≥0.1 μm, ≥0.15 μm, ≥0.2 μm, ≥0.3 μm, ≥0.5 μm)

- Can be connected to the multiple monitoring system
Specifications [KS-41B]

**Optical system**
Light-scattering method

**Light source**
Diode-pumped solid state laser (wavelength 532 nm, rated output 500 mW)

**Laser product class**
Class 1, IEC 60825-1

**Light detector**
Multi-channel silicon photodiode

**Materials of parts exposed to sample**
Synthetic quartz, PFA

**Light source**
Diode pumped solid state laser (wavelength 532 nm, rated output 500 mW)

**Accessories**
Tube A vacuum pack x 1 (2 mm x 4 mm dia. PFA tube with flared joint at one end, 1.5 m x 2, Union joint x 1), Cleaning brush set B x 1, Connection cable A (1 m) x 1

**Environmental conditions for operation**
15 °C to 30 °C, less than 80 % RH (no condensation)

**Sample inlet/outlet**
2 mm (dia.) x 4 mm (dia.) flared joint for tube

**Sample flow rate**
5 mL/min

**Data logging**
Manual measurement, automatic measurement: mean value measurement, moving average measurement, periodic measurement, scheduled time measurement

**Printer**
Printout of measurement results, date and time

**Communications**
RS-232C, USB, LAN

**Software**
KF-50A, RP monitor EVO K0505 Ver. 2/Ver.3

**Sample size range**
5 channels (factory default) ≥ 0.1 μm, ≥ 0.15 μm, ≥ 0.2 μm, ≥ 0.3 μm, ≥ 0.5 μm

**User selectable particle size**
1 to 10 channels, setting made from Controller

**Setting range**
0.1 μm to 0.5 μm

**Counting efficiency**
50 ± 10 %

**Input/output connectors**
CONTROLLER connector Connects to KE-40B1 or KZ-51
POWER connector
DATA LINK connector
LASER connector
CELL connector
LIQUID LEAK connector
PARTICLE MONITOR connector
ADDRESS connector
LASER OFF connector

**ControllerKE-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).

**RP monitor EVO K0505 Ver.2/Ver.3**
For controlling particle counters to regulate the start/end of measurement and to turn the light source/built-in pump on and off. Measurement time, period, number of measurements, alarm, and conversion settings can be set. Supports OS: Microsoft Windows XP Professional/Home Edition SP2 & SP3.

**Syringe Sampler KZ-31W**
For batch measurement of liquid-borne particle sensor
- Connecting cable (KZ30S180, optional)

**Multi-Point Unit KZ-51**
Power supply unit to connect KS-41B to RION multi-point monitoring system

**Additional Options**
- Communication cable CC-61A, Thermal paper TP-08, Clean thermal paper TP-10
- Memory CompactFlash (CF) card, CF card adapter CFC-ADP03
- DA converter interface KE-40-S06

**Sample size range**
9600 particles/mL (coincidence loss 10 %)

**Sample pressure range**
300 kPa (gauge pressure), or less

**Sample in/outlet**
2 mm (dia.) x 4 mm (dia.) flared joint for tube

**Purge air port**
One-touch type joint for dia. 6 mm tube

**Sample pressure range**
0.1 to 20 kPa

**Maximum particle number concentration**
9600 particles/mL

**Light detector**
Multi-channel silicon photodiode

**Laser product class**
Class 1, IEC 60825-1

**Optical system**
Light-scattering method

**Calibration**
Polyethylene latex (PSL) particles (refractive index 1.6) in pure water

**Power**
DC12 V (supplied by KE-40B1 or KZ-51)

**Specifications subject to change without notice.**