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

Liquid-Borne Particle Sensor
KS-42C

- Detects particles down to 0.5 \( \mu m \) size, at a flow rate of 10 mL/min
- Seven particle size ranges (7 channels, factory default setting)
  \[ \geq 0.5 \mu m, \geq 1.0 \mu m, \geq 2.0 \mu m, \geq 3.0 \mu m, \geq 5.0 \mu m, \geq 10 \mu m, \geq 20 \mu m, \]
- Integrated leak sensor with alarm output
- User selectable channels within measurement range (using KE-40B1 function)
**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
- **Light detector**: PIN type photodiode
- **Materials of parts in contact with sample**: Synthetic quartz, PFA, PTFE
- **Allowable sample type**: Any liquid that does not corrode contacting materials
- **Calibration**: Polystyrene latex (PSL) particles (refractive index 1.6) in pure water
- **Size range**: 0.5 μm to 20 μm
- **Flow rate**: 10 mL/min
- **Sample pressure range**: 300 kPa (gauge pressure) or less
- **Purge air port**: Rc1/8 (1/8 PT female screw)
- **Sample inlet/outlet**: 2 (dia.) x 4 (dia.) flared joint for tube
- **Calibration**
  - **Sample display**
  - **RP monitor EVO K0505 Ver. 2**
  - **Syringe Sampler KZ-31W**
  - **Printer**
  - **Connecting cable (KZ30S180, option)**
  - **Alarm**
  - **Controller KE-40B1**

**Dimensions and weight**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 (H) x 240 (W) x 141 (D) mm (excluding protrusions)</td>
<td>Approx. 3 kg</td>
</tr>
</tbody>
</table>

**Power**

DC12 V (supplied by KE-40B1)

**Supported OS**

- Microsoft Windows XP Professional (32 bit), Windows 7 Professional (32 bit)
- macOS 10.6.8 or later

**Specifications [KS-42C]**

- **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
- **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)
- Memory card MC-25LC1 (256 MB), CFcard adapter CFC-ADP03

**Power**

100 to 240 V AC, 50/60 Hz, approx. 150 VA

**Dimensions and weight**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>230 x 180 x 400 mm (excluding protrusions)</td>
<td>Approx. 6.5 kg</td>
</tr>
</tbody>
</table>

**Options**

- Communication cable CC-61A, Thermal paper TP-08, Clean thermal paper TP-10, Memory card MC-25LC1 (256 MB), CFcard adapter CFC-ADP03
- GO converter interface KE-40-S06

**Factory option**

Use only RION supplied cards for assured operation.

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**Specifications subject to change without notice.**

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