

Monitors 0.05 μm particle contamination
in pure water
Integrated unit combines sensor, controller,
flow meter, and data storage

Sensor/Controller/Flow meter/Data storage

ALL IN ONE



Liquid-Borne Particle Counter **KL-30B**

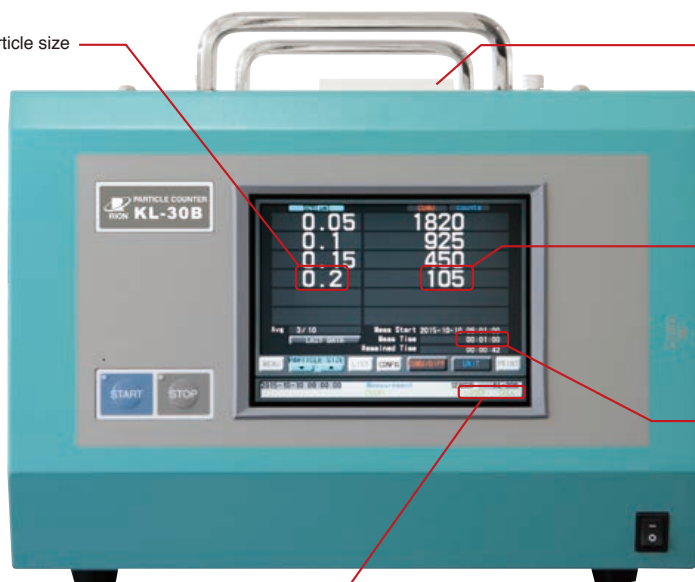
- Install directly to pure water line and monitor the process
- Purge air unit installed as standard
- Applicable to high pressure lines, up to 500 kPa (gauge pressure) as standard model and up to 700 kPa (gauge pressure) as factory option
- Equipped with D/A converter (4 - 20 mA) and alarm output contacts (standard)
- Printer built-in, CompactFlash card available (option)

Specifications [KL-30B]

Optical system	Light-scattering method
Light source	Laser diode (wavelength 830 nm, rated output 200 mW)
Laser product class	Class 1, IEC 60825-1
Light detector	Multi-channel silicon photodiode
Measurable sample types	Pure water (for purging, other fluids which do not corrode the fluid contact materials may be introduced)
Calibration	Polystyrene latex (PSL) particles (refractive index 1.6) in pure water
Setting range	0.05 μm to 0.2 μm (2 to 10 channels)
Factory default (4 channels)	≥0.05 μm, ≥0.1 μm, ≥0.15 μm, ≥0.2 μm
Sampling flow rate	Flow rate 10 mL/min and purge flow rate 0.1 to 1 L/min combined (Purge flow rate will differ depending on sample fluid pressure)
Sample inlet/outlet	4 x 6 (dia.) or 3.96 x 6.35 (dia.) flared joint for tube
Sample pressure range	100 to 500 kPa (gauge pressure)
Sample temperature range	15 °C to 30 °C (no condensation in flow system)
Materials of parts exposed to sample	Synthetic quartz, fluorocarbon rubber, fluoroplastic, PVC, Pyrex glass, SUS304/316, POM
Counting efficiency	1% ±0.3%

Effective flow rate	0.1 ±0.03 mL/min
Size resolution	10% or less (PSL particles in 0.15 μm range)
Maximum particle number concentration	200 000 particles/mL (coincidence loss 10%)
False count rate	Less than 0.05 particles/mL average
Environmental conditions for operation	15 °C to 30 °C, less than 85% RH (no condensation)
Power	100 to 240 V AC, 50/60 Hz, approx 80 VA
Dimensions and weight	230 (H) x 330 (W) x 569 (D) mm (excluding protruding parts), approx. 19.8 kg
Accessories	Power cord (2.5 m) x 1, Thermal paper TP-08 x 2 rolls, CF Dummy card x 1
Factory option	Purge air source selector unit, High pressure compatibility (700 kPa)
Options	Thermal paper TP-08, Lint-free thermal paper TP-10 Sampling tube 5 m (4 x 6 dia., both ends flared) KL-30-S16 Sampling tube 10 m (4 x 6 dia., both ends flared) KL-30-S15 CompactFlash card MC-25CF2 (256 MB) Communication cable CC-61A, CC-63A

Particle size



Printer

Measurement value

Measurement time

Status information

```

*****
2015-10-10 14:20:07
KL-30B : 00000000
                TIME: 600S
PERIOD: 00:10:00  AVG:  --
                MOVING AVG: 10
ON TIME:  --:--  OFF TIME:  --:--
*****

#1 2015-10-10 14:20:07 600S
   μm  CUMU.  DIFF.  Counts
0.05   64.0   64.0
0.1     0.0    0.0
0.15    0.0    0.0
0.2     0.0    0.0

#2 2015-10-10 14:30:07 600S
   μm  CUMU.  DIFF.  Counts
0.05   32.0   32.0
0.1     0.0    0.0
0.15    0.0    0.0
0.2     0.0    0.0
    
```

Print sample of internal printer

* Company names and product names mentioned in this catalog are usually trademarks or registered trademarks of their respective owners.
* Specifications subject to change without notice.



ISO 14001 RION CO., LTD.
ISO 9001 RION CO., LTD.

Distributed by:

 **RION CO., LTD.**
<https://www.rion.co.jp/english/>

3-20-41, Higashimotomachi, Kokubunji,
Tokyo 185-8533, Japan
Tel: +81-423-59-7878, Fax: +81-423-59-7458