Finally -- A Sensor for In-Line Monitoring of Liquid-Borne Particles with 0.1 µm Resolution

- **Monitor particles in real time at the actual point of use**
- **Characterizing Contaminants**
  - Process monitoring at critical system points
- **Real-Time Particle Monitoring**
  - Control and maintain quality in real time
- **High Detection Efficiency**
  - With greater low end sensitivity
- **On the Spot**
  - Suited for use with a variety of liquids
- **Multi-Point Sensing**
  - System integration
- **Facility Monitoring System**
  - Compact, low-price sensor ideal for integrated use in central chemical supply systems and wet benches
Specifications

Optical System: 90°sideway light-scattering principle
Light source: Laser diode (wave length : 830 nm)
Light detector: PIN Photo diode
Materials of component parts exposed to sample fluid: PFA, fused silica (KS-16), sapphire (KS-16F)
Minimum diameter of countable particle: 0.1 μm
Measurement size range: Five channels 0.1, 0.15, 0.2, 0.3, 0.5 μm
Counting efficiency: 70 ± 15 % (KS-16)
60 ± 15 % (KS-16F)
Flow rate: 10 mL/min
Maximum particle concentration:
1200 particles/mL (coincidence loss 5% or less)
Sample fluid temperature range: 15 to 35°C
Allowable sample fluid pressure: 300 kPa or less (gauge pressure)
Dimensions:
Main unit: 240 (W) × 110 (H) × 150 (D) mm (excluding protruding parts)
Weight: Approx. 3.5 kg
Power supply unit:
70 (W) × 111 (H) × 184 (D) mm (excluding protruding parts)
Weight: Approx. 0.8 kg
Interface: RS-232-C, RS-485

Sampling Example

Monitoring the purity of wet bench cleaning liquid

Monitoring the purity inside a wet bench cleaning bath

System

Operation Control of KS-16 Via RS-232-C Interface

Operation Control of KS-16 Via RS-485 Interface

Monitoring Systems (Option)

RP Monitor K9461 (Ver. 2, 3)
- Particle counter automatic operation
- Can drive any Rion particle counter in RS-232C mode (Ver. 2).
- RS-232C/RS-485 converter allows multi-sensor system with 20 points (Ver. 3).

Multi-Point Monitoring Software KF-02A
- Measurement control, data collection, result display and printing for up to 100 sensors.
- Supports up to 5 controllers, each with up to 20 sensors.

KS-16 Dimensional Drawing

RP Monitor System for up to 20 Points. LMS and KF-02A Support Multi-Point Monitoring at 100 Points or More.

Specifications subject to change without notice.