

Two-channel Remote Sensor for Facility Monitoring System (PoE Ready)



HAL-RPC200

Features

- Simultaneously monitors two channels
- Warning for excess of count limit
- TCP/IP communications
- True Ethernet connection for high-speed data transmission
- PoE ready for auto power and control
- 24/7 continuous remote monitoring
- Stainless Steel housing
- Flexible power options

The HAL-RPC200 Remote Particle Counter is the key element of an

intelligent multipoint remote facility monitoring system. It is useful in measuring particle concentrations in ultra-clean environments by its single particle counting ability and classification of a clean facility. The data collection and sampling time interval can be remotely carried out by a remote computer terminal. The system can sample 24/7 continuously and remotely monitor the status of the clean facility and give warning of an excess of count limit preset by the user. It is in compliance with international standards (JIS B 9925:1997 and ISO14644-1) and has CE certification.

The unique features of this system are it's easily integrated via Ethernet (TCP/IP) communications and scalable. The remote units can be configured to as many as needed for your application; upwards to 1000 sensors can be installed within one facility system. The instrument can be powered over its Ethernet connection PoE (Power-Over-Ethernet compliant with IEEE 802.3af) for simplicity of system installation or a local power supply. Configuring your installation can be done locally with a PC or via a web browser.

Applications

- Ultra-clean facility monitoring
- Trace contamination source
- Excess of count limit warnings
- 24/7 remote continuous monitoring

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| Particle Size | 0.3, 0.5 μ m (User configurable) |
| Light Source | Laser Diode |
| Coincidence Loss | < 5% @ 2,000,000 particles per cubic feet |
| Flow Rate | 2.83 Liter/min (0.1cfm) |
| Counting Efficiency | 100 \pm 10% @ 0.5 μ m |
| Zero Count | <1 count per 5 minutes |
| Calibration Standard | JIS-B-9921 (1997), ASTM-F649-01, ASTM-F328-98 (NIST traceable) |
| Warning for Excess of Limit | Class 1—100,000 (FED209E) or 2—9 (ISO14464-1) |
| Monitoring | Continuous |
| Error Indication | Excess of maximum count limit, laser degradation |
| Interface | RJ45 (TCP/IP, PoE ready) |
| Status Indication | Green: Power on and system ready Red: System or communication errors |
| Power | PoE or local AC adapter 6 ~ 9VDC/100mA |
| Dimensions | 104 (W) \times 64 (D) \times 38 (H) mm |
| Weight | < 350 grams |
| Environmental Conditions | Operating: 5 ~ 50 $^{\circ}$ C, < 90%RH Storage: -20 ~ 65 $^{\circ}$ C, < 90%RH |
| Standard Accessories | Kinetic probe, user manual, AC adapter, calibration certificate |
| Optional | Application software for facility monitoring system, router or PoE ready router. |

Specifications