HalTech

Two-channel Remote Sensor for Facility Monitoring System (RS485)

HAL-RPC201

Features

- Simultaneously monitors two channels
- Warning for excess of count limit
- Stainless housing
- RS485 communications
- Compatible with most existing facility monitors
- 24/7 continuous remote monitoring
- Flexible power options

The HAL-RPC201 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 clean facility. The data collection and sampling time interval can be remotely carried out by a remote computer terminal. The system can run 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 CE certification.

The system is interfaced via RS485 and allows long distance communication. It is compatible with most of the facility monitors on the market. The instrument can be powered at the user's choice either via a RJ45 connector that integrates the communication lines with a power line or by a local power supply.

Specifications

Applications

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

Particle Size	0.3, 0.5µm default (user may select other sizes)
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±10% @ 0.5µm
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 (RS485 and power line)
Status Indication	Green: Power on and system ready Red: System or communication errors
Power	PoE or local AC adapter 6 9VDC
Dimensions	104 (W) × 64 (D) × 38 (H) mm
Weight	< 350 grams
Environmental Conditions	Operating: 5 ~ 50°C, < 90%RH Storage: -20 ~ 65°C, < 90%RH
Standard Accessories	Kinetic probe, user manual, AC adapter, calibration certificate
Optional	Application software for facility monitoring system