



**LIGHTHOUSE**  
WORLDWIDE SOLUTIONS  
*Technology That Counts!*



## REMOTE 1104LD

### Airborne Particle Counter

Using state-of-the-art Long Life Laser Diode technology, the Lighthouse **REMOTE 1104LD** is an industry first - a laser diode based remote particle counter with a sensitivity of 0.10 micron at a high flow rate of 1.0 CFM (28.3 LPM) that uses an optics and photodiode system designed to reduce or eliminate the temperature issues associated with high power laser diode sensors.

Designed with reliability and quality in mind, the **REMOTE 1104LD** features our long-life laser diode technology that provides higher concentration limits, a better signal to noise ratio and requires less routine maintenance than conventional HeNe laser-based particle counters.

The **REMOTE 1104LD** supplies continuous real time data at a cost-effective price per point. Very simple to integrate with large facility monitoring and management systems, the **REMOTE 1104LD** can transfer up to 8 channels of simultaneous particle count data via RS-485 MODBUS.

**Designed and built by  
Lighthouse - a name you can trust.**

Lighthouse is an ISO 9001:2008 Registered Company.

[www.golighthouse.com](http://www.golighthouse.com)

### *Features:*

- ★ 0.10 - 1.0  $\mu\text{m}$  Sensitivity
- ★ 1.0 CFM (28.3 LPM) Flow Rate
- ★ Up to 8 Channels of Simultaneous Data
- ★ World's Smallest 1.0 CFM 0.10  $\mu\text{m}$  counter
- ★ Meets ISO 21501-4 Standards
- ★ Long Life Laser Diode
- ★ Small Footprint
- ★ Status Indicators
- ★ RS-485 MODBUS
- ★ Stainless Steel Enclosure
- ★ Interfaces to Facility Monitoring Systems
- ★ Uses External Vacuum Source
- ★ Designed for Reliability
- ★ Designed to Ensure 21 CFR Part 11 Compliance when used with Additional Software
- ★ No Routine Laser Tube Replacements
- ★ No Routine Laser Optics Cleaning
- ★ Cooler Running Dual-Avalanche Photodiode Detector Array Design

### *Benefits:*

- ★ 2 Year Warranty
- ★ Cost Effective Price per Point
- ★ Proven Data Integrity
- ★ Provides Continuous Real-Time Data
- ★ Reduced Maintenance costs over HeNe
- ★ Easy System Integration
- ★ International Support
- ★ Low Cost of Ownership



## Specifications

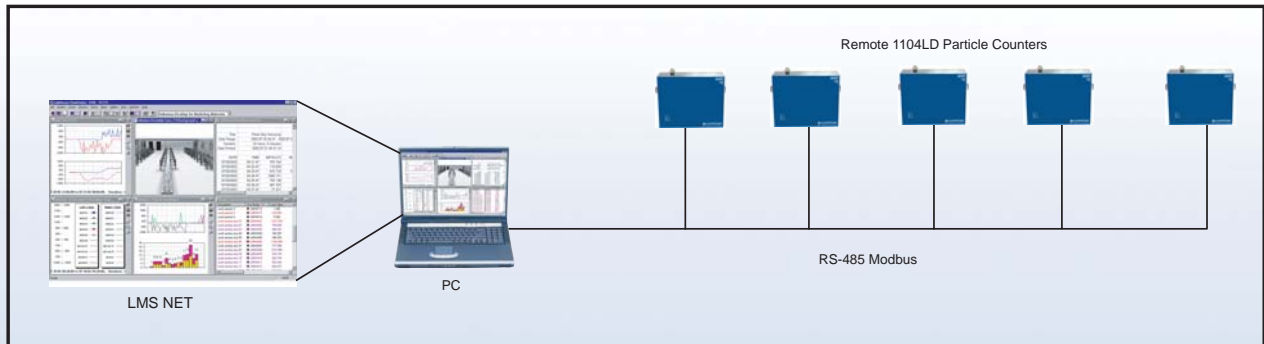
	REMOTE 1104LD
<b>Size Range:</b>	0.10 - 1.0 µm
<b>Channel Sizes:</b>	Standard: 0.10, 0.15, 0.2, 0.25, 0.3, 0.5, 0.7, 1.0 µm
<b>Communication Modes:</b>	RS 485 MODBUS
<b>Counting Efficiency:</b>	50% @ 0.1 µm; 100% for particles > 0.15 µm(per JIS)
<b>Flow Rate:</b>	1.0 CFM (28.3 LPM)
<b>Light Source:</b>	Long Life Laser Diode
<b>Zero Count Level:</b>	<1 count / 5 minutes (per JIS)
<b>Concentration Limits:</b>	500,000 Particles / ft <sup>3</sup> (17,150,000 / m <sup>3</sup> ) @ 5% Coincidence Loss, per ISO 21501-4
<b>Calibration:</b>	NIST Traceable, per ISO 21501-4
<b>Vacuum Requirements:</b>	External Vacuum required, nominal 1.0 CFM >18" (45.72 cm) of Hg
<b>LED Indicators:</b>	Power, Flow, Service, Sampling
<b>Supporting Software:</b>	Lighthouse Monitoring System, LMS Express, LMS Express RT, LMS Net
<b>Enclosure:</b>	Stainless Steel
<b>Power:</b>	24 VDC
<b>Dimensions:</b>	10.5" (w) x 7.65" (h) x 3.35" (d) [26.67 x 19.43 x 8.51 cm]
<b>Weight:</b>	7.0 lb (3.18 kg)

## Environmental Conditions

**Operating:** 50°F to 104°F (10°C to 40°C) / 20% to 95% non-condensing  
**Storage:** 14°F to 122°F (-10°C to 50°C) / Up to 98% non-condensing

## Accessories

**Included:** Operating Manual on CD, Purge Filter, Power Supply, Power Cord  
**Optional:** Isokinetic Sampling Probe, Sample Tubing, Cabling



RS 485 MODBUS

## SAMPLE SYSTEM INTEGRATION

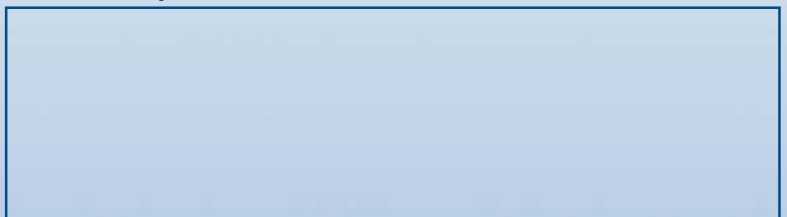
**Manufactured by:**



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