



**LIGHTHOUSE**  
WORLDWIDE SOLUTIONS



## REMOTE 5014PN

### AIRBORNE PARTICLE COUNTER

#### MODBUS Output

The **REMOTE 5014PN** meets the requirements of today's indoor air quality and building monitoring applications. Incorporating the latest in laser/optical particle counting technology, Lighthouse designed the **REMOTE 5014PN** for continuous trouble-free operation.

The **REMOTE 5014PN** uses a built-in vacuum pump and flow control system to insure accurate and reliable sensor performance.

With a sensitivity of 0.5 micron at a controlled flow rate of 0.1 CFM, the **REMOTE 5014PN** provides continuous real-time data at a cost-effective price per point.

The **REMOTE 5014PN** integrates seamlessly into large facility monitoring and management systems and transfers up to 4 channels of simultaneous particle count data using RS-485 MODBUS or Ethernet MODBUS TCP.

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

Lighthouse is an ISO 9001:2000 Registered Company

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

### *Features:*

- ★ Channel sizes: 0.5 - 5.0µm for GMP Compliance
- ★ 0.1 CFM (2.83 LPM) Flow Rate
- ★ Internal Vacuum Pump with Flow Control
- ★ Up to 4 Channels of Simultaneous Data
- ★ Meets JIS Standards
- ★ NEMA Style 316L Stainless Steel Enclosure
- ★ NEMA Style Powder-coated Steel Enclosure Option
- ★ LED Status Indicators
- ★ Interfaces to Facility Monitoring Systems
- ★ RS-485 MODBUS or Ethernet MODBUS TCP Output

### *Benefits:*

- ★ 2 Year Warranty
- ★ Cost Effective Price per Point
- ★ Easy System Integration
- ★ AC and DC Power Options
- ★ International Sales and Service Support
- ★ Low Cost of Ownership

### *Applications:*

- ★ HVAC Monitoring
- ★ Indoor Air Quality Monitoring
- ★ Food Process Monitoring
- ★ Public and Private Building Monitoring
- ★ Aseptic Process Monitoring
- ★ Isolator Monitoring
- ★ Aerospace
- ★ Chemical Manufacturing
- ★ Equipment Monitoring
- ★ Pharmaceutical Packaging and Manufacturing
- ★ Trend Analysis
- ★ Cleanroom Laundries
- ★ Cleanroom Packaging
- ★ Semiconductor
- ★ Hard Disk Drive Manufacturing



## Specifications:

<b>5014PN</b>	
<b>Size Range:</b>	0.5 - 25.0µm
<b>Channel Sizes:</b>	Standard: 0.5, 5.0µm Standard: 0.5, 10.0µm
<b>Counting Efficiency:</b>	50% @ 0.5µm, 100% for particles >0.75µm (per JIS)
<b>Flow Rate:</b>	0.1 CFM (2.83 LPM)
<b>Laser Source:</b>	Laser Diode
<b>Zero Count Level:</b>	<1 count / 5 minutes (per JIS)
<b>Concentration Limits:</b>	2,000,000 particles / ft <sup>3</sup> @ 5% coincidence loss
<b>Calibration:</b>	NIST Traceable
<b>Sample Output:</b>	Internally filtered to HEPA standards (>99.997% @ 0.3µm)
<b>Vacuum Source:</b>	Internal Pump
<b>Air Flow:</b>	Internally Monitored and Controlled
<b>Communication Modes:</b>	MODBUS: RS-485; Optional Ethernet: Ethernet MODBUS TCP
<b>LED Indicators:</b>	Power, Flow, Service, Sampling
<b>I/O Connection:</b>	RJ-45
<b>External Pump Switch:</b>	2-pin Phoenix dry-contact relay
<b>Supporting Software:</b>	<i>Lighthouse Monitoring System; LMS XChange; LMS Express, Express RT, RT+</i>
<b>Enclosure:</b>	NEMA Style 316L Stainless Steel - or - NEMA Style Powder-coated Steel Option
<b>Power:</b>	110 / 220 VAC, 50-60Hz or 24VDC 60W
<b>Dimensions:</b>	10" (w) x 12" (h) x 6.9" (d) [25.4 x 30.4 x 14.9 cm]
<b>Weight:</b>	20 lbs (9 kg)

## Environmental Conditions:

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

## Accessories:

**Included:** Operating Manual on CD; AC or DC Power Kit  
**Optional:** Printed Operating Manual; Cabling; Data Cable; Sample Tubing

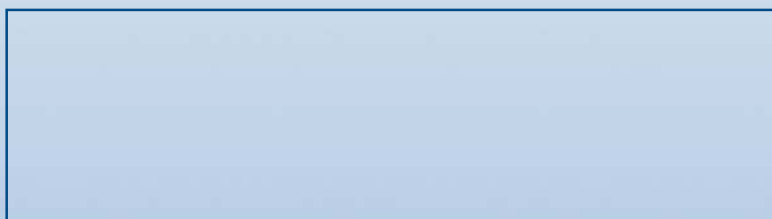
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