

# RemoteLPC

## REMOTE LIQUID PARTICLE COUNTER



**I**NCORPORATING the latest in laser optical particle counting technology, Lighthouse designed the Remote LPC particle counter line for continuous trouble-free operation.

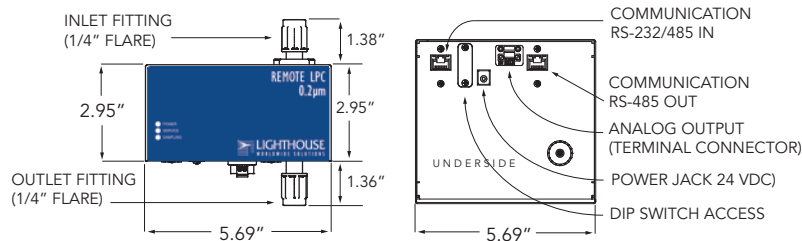
Select models with minimum sensitivity ranges of 0.1, 0.2, 0.3, or 0.5  $\mu\text{m}$ . With a flow rate of 100 ml per minute, the Remote LPC provides real-time continuous data collection at a cost-effective price per point.

The Remote LPC integrates seamlessly into large facility monitoring and management systems and transfers up to 2 channels of simultaneous particle count data using the 4-20mA protocol or 4 channels of data via modbus.

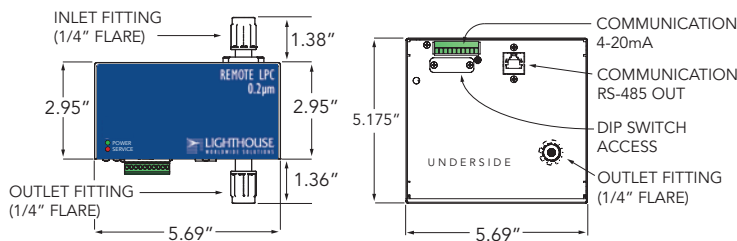
### FEATURES

- Size ranges 0.1 - 100  $\mu\text{m}$
- Up to 4 channels of data
- 100 ml per minute flow rate
- LED status indicators for power and service
- 4-20mA or MODBUS output
- Interfaces with facility monitoring systems
- Compact size
- Designed for reliability
- 2 year warranty

**MODBUS MODEL**



**4-20mA MODEL**



**T E C H N I C A L   D A T A S H E E T**

**Remote LPC Remote Liquid Particle Counter**

Features	Remote LPC 0.1 µm	Remote LPC 0.2 µm	Remote LPC 0.3 µm	Remote LPC 0.5 µm
<b>Size Range</b>	0.1 - 0.5 µm	0.2 - 2.0 µm	0.3 - 3.0 µm	0.5 - 100.0 µm
<b>Standard 2 Channels 4-20mA</b>	0.1, 0.2 µm	0.2, 0.3 µm	0.3, 0.5 µm	0.5, 1.0 µm
<b>Optional 2 Channel 4-20mA</b>	0.1, 0.3; 0.1, 0.5 µm	0.2, 0.5; 0.2, 1.0; 0.2, 2.0 µm	0.3, 0.7; 0.3, 2.0; 0.3, 3.0 µm	0.5, 2.0; 0.5, 5.0 µm
<b>Standard 4 Channels Modbus</b>	0.1, 0.2, 0.3, 0.5 µm	0.2, 0.3, 0.5, 0.7 µm	0.3, 0.5, 0.7, 1.0 µm	0.5, 0.7, 1.0, 2.0 µm
<b>Optional 4 Channels Modbus</b>		0.2, 0.5, 1.0, 2.0 µm	0.3, 0.5, 1.0, 3.0 µm	0.5, 1.0, 2.0, 5.0 µm
<b>Concentration Limit</b>	64,000 counts/ml @ 5% coincidence error.	4,000 counts/ml @ 5% coincidence error.	4,000 counts/ml @ 5% coincidence error.	4,000 counts/ml @ 5% coincidence error.

<b>Flow Rate</b>	100 mL / minute.
<b>Laser Source</b>	Laser Diode.
<b>Calibration</b>	NIST traceable.
<b>Data Storage</b>	Rotating buffer 2,000 records (modbus models)
<b>Communication Modes</b>	RS232/485 via RJ45 to PC, RS485 modbus, ASCII, Modbus or MR protocol.
<b>LED Indicators</b>	Power, Sampling (4-20mA model); Power, Service, Sampling (485 modbus model).
<b>External Alarm Output</b>	Normal open dry contact rated 0-60v AC/DC 1 Amp
<b>Enclosure</b>	Stainless steel.
<b>Sample Inlet/Outlet Connection</b>	1/4" Flaretek™
<b>Sample Temperature</b>	32 - 140°F (0 - 60°C)
<b>Sample Pressure</b>	150 PSI.
<b>Wetted Surface Materials</b>	Quartz, PTFE, PFA.
<b>Power</b>	24 VDC.
<b>Dimensions</b>	5.7"(l) x 5.2"(w) x 3.0"(h) [14.47 x 13.2 x 7.6 cm].
<b>Weight</b>	3.5 lbs (1.58 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.

**Included**

Operating manual on CD; power supply; tubing; flow cell cleaning brush with Micro90 cleaning solution.

**Optional**

Printed operating manual; flow control device; sample tubing; cabling; flaring kit; flare nuts; LPC stand with flow meter mount; LMC flow meter aluminum; LPC flow meter Teflon PFA; remote mounting bracket.

**Acceptable Chemicals**

Water  
Deionized Water  
Nitric Acid 70%  
Sulphuric Acid 96%  
Hydrochloric Acid 37%  
Ammonium Hydroxide 29%  
Hydrogen Peroxide 30%  
Phosphoric Acid 86%  
Potassium Hydroxide  
Isopropyl Alcohol  
Acetone  
N-methyl Perryiodine

**Symbol**

H<sub>2</sub>O  
DI H<sub>2</sub>O  
HNO<sub>3</sub> 70%  
H<sub>2</sub>SO<sub>4</sub>  
HCL  
NH<sub>4</sub>OH  
H<sub>2</sub>O<sub>2</sub>  
H<sub>3</sub>PO<sub>4</sub>  
KOH  
IPA  
C<sub>2</sub>H<sub>2</sub>O  
NMP

**Unacceptable Chemicals**

Nitric Acid  
Ammonium Fluoride  
Hydrofluoric Acid 50%  
Hydrofluoric Acid 5%  
Hydrofluoric Acid 0.5%  
Tetramethylammonium Hydroxide  
Buffered Hydrofluoric Acid  
Buffered Oxide Etch

**Symbol**

HNO<sub>3</sub>  
NH<sub>4</sub>F  
HF 50%  
HF 5%  
HF 0.5%  
TMAH  
BHF  
BOE

**Distributed By:**



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