# Vertex50



UR Vertex50 is the smallest 50 nanometer liquid particle counter on the market and incorporates a 3.5" TFT touch screen to simplify the user interface. Based on state-of-the-art technology and built by Lighthouse Worldwide Solutions, Vertex50 is backed by a two-year warranty and international support.

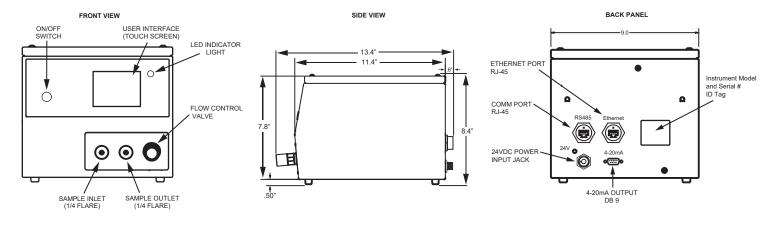
The Vertex50 industry standard RS-485 MODBUS and 4-20mA communication protocols provide seamless integration into facility monitoring systems or can be used as a stand-alone device.

Using its integrated ethernet TCP/IP interface allows the Vertex50 to connect to standard corporate ethernet LAN's as easily as it connects to facility monitoring systems.

## FEATURES

- Channel sizes: 50nm, 100nm, 150nm, 200nm
- Four channels of simultaneous count data
- 100 mL per minute flow rate
- Built-in 3.5" color touch screen display
- 316L stainless steel construction
- Ethernet, RS485 Modbus Serial, 4-20mA
- NEMA style enclosure
- Integrated manual flow control
- Interfaces with existing building automation and facility management systems





## TECHNICAL DATASHEET

# Vertex50 Liquid Particle Counter

Features		
Size Range	50 - 200 nm	
Channels	4	
Standard Channel Sizes	50 nm, 100 nm, 150 nm, 200 nm	
Flow Rate	100 mL/min	
Sample Volume	5.0 mL/min	
Zero Count Level	≤ 20 count/L	
Laser Source	Solid state laser	
Calibration	NIST traceable	
Communication Modes	Ethernet, Serial RS-485, 4-20mA	
Display	TFT color touch screen	
Concentration Limit	10,000 counts/mL @ 10% coincidence loss	
Enclosure	316L stainless steel	
Sample Inlet/Outlet Connection	1/4" Flaretek™	
Environmental Conditions Operating	50°F to 104°F (10°C to 40°C), 20% to 95% non-condensing	
Environmental Conditions Storage	14°F to 122°F (-10°C to 50°C), up to 98% non-condensing	
Sample Temperature	50°F to 122°F (10°C to 50°C)	
Sample Pressure	20 PSI to 72 PSI (138 kPa to 496 kPa)	
Wetted Surface Materials	Quartz, PFA, Kalrez, PTFE	
Communication Protocol	MODBUS TCP, MODBUS Serial, 4-20mA	
Power External Se	upply: Rated input 120-240V AC 50/60Hz, 0.7A - 1.4A. Rated Output: 24V DC, 5A	
Dimensions	9.0"(w) x 13.4"(d) x 8.4"(h) [22.9 x 34.0 x 21.3 cm]	
Weight	13.5 lbs (6.1 kg)	

### Included

24V power adapter, power cord (US/UK/EU/CN), 1.8m USB-RS485 serial cable with industrial connector, 25' ethernet cable with industrial connector, USB flash drive with Operators Manual, 2 x 10 foot sample inlet and outlet tubes (with flared tips and lock nuts), flow cell cleaning kit, calibration certificate and carrying case.

### Optional

**Distributed By:** 

Printed operating manual; additional tubing, additional serial or ethernet cables with industrial connector, flow cell cleaning kit.



Lighthouse Worldwide Solutions reserves the right to change specifications without notice.



