

## RNet™

### Sensor for Airborne Particles

The RNet™ offers a combination of quality and value that is second-to-none. It features a proprietary, single-plate design that reduces system complexity and the number of heat-generating components, while increasing the use of heat-dissipating materials. This not only lowers the initial costs, but extends the life of the laser diode, reducing operating expenses and earning a three year warranty.



#### BENEFITS

##### Reduce Defects

- Real-time monitoring of defect-causing particles
- Proven technology provides reliable and accurate data
- Users can react immediately to particle contamination events

##### Increase Productivity

- Low-cost solution for multisensor monitoring
- Easy integration with Facility Net software for comprehensive management of cleanroom conditions
- Easy to clean/wipe down; designed to minimize particle traps
- Proven data integrity

##### Cost-Effective

- Very low cost of ownership
- Outstanding diode laser lifetime
- Small footprint makes it ideal for installing in tight quarters
- Rugged, chemical-resistant, ESD-compatible KYDEX® cover
- Easy mounting
- Three-year warranty

**Without measurement, there is no control.**

#### FEATURES

- 0.3 micron sensitivity
- Two channels of continuous, real-time data
- Sample flow rate of 0.1 CFM
- RS-485 output
- Compact size
- Status indicators
- External alarm output
- Smooth, durable exterior surface
- Controlled by facility monitoring or data acquisition software

#### APPLICATIONS

- Minienvironment monitoring
- Cleanroom monitoring
- Dedicated monitoring of critical locations
- Trend analysis
- Statistical process control
- Multisensor monitoring



**PARTICLE  
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<b>Size range :</b>	0.3, 0.5 $\mu\text{m}$ ; 0.3, 1.0 $\mu\text{m}$ ; 0.3, 2.0 $\mu\text{m}$
<b>Flow rate:</b>	0.1 CFM (2.8 LPM)
<b>Flow control:</b>	Venturi
<b>Flow accuracy:</b>	<5% error
<b>Light source:</b>	Laser diode
<b>Calibration:</b>	Calibration materials used are traceable to the USA National Institute for Standards and Technology (NIST).
<b>Counting efficiency:</b>	50% $\pm$ 20% at 0.30 $\mu\text{m}$ (meets JIS)
<b>Zero count level:</b>	< 1 count per 5 min. (meets JIS)
<b>Maximum concentration*:</b>	2,000,000/ft <sup>3</sup>
<b>Exterior surface:</b>	KYDEX cover, anodized aluminum plate, delrin sample probe
<b>Dimensions (w, h, d):</b>	3.7 x 4.4 x 1.6 in. (9.4 x 11.2 x 4.1 cm)
<b>Weight:</b>	1.0 lb. (0.46 kg)
<b>Sample probe or tubing:</b>	1/4 in. ID
<b>Flow system:</b>	External vacuum
<b>Vacuum source:</b>	>11 in. Hg
<b>Power:</b>	6 VDC nominal (min. 5.5 VDC, max. 8.5 VDC); 500 mA
<b>Controlling software:</b>	Facility Net, Pharmaceutical Net
<b>Communications:</b>	RS-485 with either PMS or MODBUS <sup>®</sup> protocol
<b>Data security:</b>	Meets 21CFR11 for download to Facility Net or Pharmaceutical Net
<b>External alarm output:</b>	Max. voltage, 24 V; max. current, 1 A
<b>Environment:</b>	Temperature: 4-35° C Humidity: 10-85%, non-condensing

\* Greater than 90% accuracy (less than 10% coincidence loss) at maximum recommendation ambient concentration.  
 KYDEX<sup>®</sup> is a registered trademark of the Kleerdex Company  
 RNet<sup>™</sup> is a trademark of Particle Measuring Systems, Inc.  
 Particle Measuring Systems, Inc. reserves the right to change specifications without notice.

## AUTHORIZED REPRESENTATIVE



Registration applies to the Boulder, Colorado facility



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