



# Model 3301 & 3501

Remote Airborne Particle Counters

#### **Features**

- 3301: Measures 0.3 μm to 25.0 μm
- 3501: Measures 0.5 μm to 25.0 μm
- 0.1 CFM (2.83 LPM) flow rate
- · Long life laser diode technology
- Measures up to 4 channels of simultaneous data
- Particle concentrations up to 15,000,000 Particles/ft³ @ 10% coincidence loss
- · Internal critical orifice
- Connect using Modbus RTU/ASCII over isolated RS-485
- Complies with ISO 21501-4 and JIS B9921 standards
- Easy to clean and wipe down with minimal particle traps
- · Versatile mounting options
- · User configurable alarm light
- · LED Indicators
- Seamless integration into a facility monitoring system
- · Lightweight stainless steel enclosure

The 3301 and 3501 particle counters provide a range of particle size measurement from 0.3 or 0.5 to 25.0  $\mu m$  at a flow rate of 0.1 CFM (2.83 LPM). These sensors allow for efficient particle counting with specifications that exceed the ISO 21501-4 and JIS B9921 calibration standards.

These sensors have 4 fixed particle size channels and are equipped with an integral critical orifice and flow sensor to provide a stable flow rate from an external vacuum source. Integration into a building automation or facility monitoring system is easy via isolated RS-485 Modbus communication.

### Specifications

| Model                  | 3301  | 3501   |
|------------------------|---|--|
| Size Range             | 0.3 to 25.0 μm  | 0.5 to 25.0 µm                                     |
| Size Channels          | Factory calibrated at 0.3, 0.5, 1.0, 5.0 µm   | Factory calibrated at 0.5, 1.0, 2.5, 5.0 µm        |
| Number of Channels     | 4   | 4  |
| Counting Efficiency    | 50% @ 0.3 μm; 100% for particles > 0.45 μm per JIS  | 50% @ 0.5 μm; 100% for particles > 0.75 μm per JIS |
| Flow Rate              | 0.1 CFM (2.83 LPM)  |  |
| Concentration Limits   | 15,000,000 Particles/ft³ @ 10% coincidence loss   |  |
| Light Source           | Long life laser diode   |  |
| Zero Count             | < 1 count / 60 minutes (< 1 particles /6/ft³)   |  |
| Calibration            | NIST traceable  |  |
| Vacuum Requirements    | External vacuum > 15" (38.1cm) of Hg  |  |
| Airflow                | Internally monitored  |  |
| Alarm                  | User configurable alarm light   |  |
| Communication Modes    | MODBUS™ RTU or ASCII outputs (over isolated RS-485)   |  |
| Standards              | ISO 21501-4 and JIS B9921   |  |
| Instrument Calibration | Recommended minimum once per year   |  |
| External Surface       | Stainless steel   |  |
| Dimensions (L x W x H) | 3.59" x 1.83" x 5.01" (9.1 cm x 4.7 cm x 12.7 cm) including probes and connectors   |  |
| Weight                 | 1.65 lb. (0.75 kg)  |  |
| Accessories            | Wiring Connector, operating manual on USB flash drive   |  |
| Optional Accessories   | Power Supply, Remote Mounting Bracket,<br>Stainless Steel Barbed Isoprobe (0.1 CFM/2.83<br>LPM), Purge Filter Assembly, and Sample &<br>Vacuum Tubing |  |
| Sample Time            | 1 second to 18 hours  |  |
| Power                  | 9 - 24 VDC (< 2.5 watts)  |  |
| Operating Conditions   | 41° to 104°F (5° to 40°C) / 20% to 95% non-<br>condensing   |  |
| Storage Conditions     | 32° to 122°F (0° to 50°C) / Up to 98% non-<br>condensing  |  |
| Warranty               | 2 year limited warranty. Extended warranties available  |  |



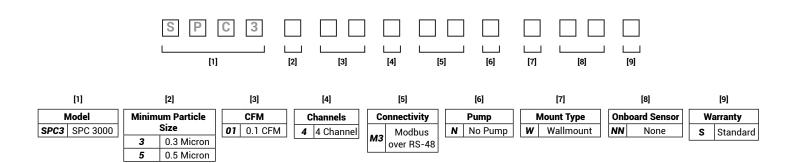






## Ordering information

Example part number: SPC3-3-01-4-M3-N-W-NN-S



#### **Dimensions**

