

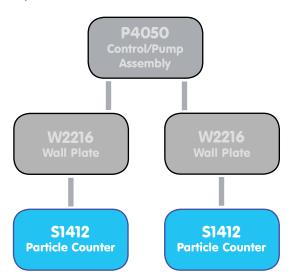
The Series 1000 continuous monitoring particle counters offers a compact ISO21501-4 compliant yet cost effective solution to demonstrate compliance with GMP/GLP. Robust and reliable in a sealed stainless steel enclosure, the instrument is ideal for use in environments such as hospital pharmacies. Quick release connectors for vacuum and power/communications and a keyslot mounting plate mean that the unit can be removed for service or calibration without the use of tools. The particle counter has integral flow failure detection to ensure that you get a clear indication of flow failure if a cap is left on following sanitisation.

Optimised for use with enVigil PnP, the S1412 uses serial RS485 data communications via standard CAT5 cable, with spare cores being used to carry power to the counter. When used with Pharmagraph Counter Controllers these serial units do not require to be re-programmed with an address when being swapped, as the address is provided by the control assembly separate from the particle counter. An indicator window on the front of the unit allows correct operation of the unit to be confirmed and faults to be diagnosed quickly. The particle counter can easily be swapped by non-technical staff since no programming is required, thus ensuring that operations continue with minimal down time.

Wall plates with quick release connectors are available along with umbilicals that connect between the wall plates and the particle counters. The wall plates then connect back to a Control Assembly via facility containment, again using standard CAT 5 cable and vacuum tube.

The separate Control Assembly (P4050 series) houses the power supply, Counter Controller electronics and vacuum pumps for up to four counters, greatly simplifying on-site installation. Where more than four particle counters are required, additional Control Assemblies (P4050) can simply be added to expand system capacity.

The R1510 particle counter used within the S1412 is also available separately for use where a sealed enclosure is not required.







# **S1412 Particle Counter Specification**

- Contains R1510 Particle Counter: 0.5 $\mu$  and 5.0 $\mu$  channels
- Complies with ISO21501-4
- Flow rate: 1cfm with integral flow failure detection
- 316 Stainless steel satin finish IP65 sealed enclosure with quick release power/communicaton connector and quick release vacuum connector

Width 109mm

Height 117mm (excluding connectors)

Depth 61mm (excluding mounting screws)

Weight 1.2kg

Power supply

9 to 30Vdc, 24Vdc nominal

<3W @12Vdc

Vacuum supply

At least 38.1 cm (15 inches) Hg

Interfaces

Serial: RS485

Environmental

Operating temperature 10 to 40°C Storage temperature -20 to 50°C

#### **R1510 Remote Particle Sensor Specification**

- R1510 Particle Counter: 0.5 $\mu$  and 5.0 $\mu$  channels
- Complies with ISO21501-4
- Flow rate: 1cfm with integral flow failure detection
- 304 Stainless steel satin finish

Width 93mm

Height 57mm

Depth 38mm (including mounting flange)

Weight 0.28kg

Power supply

9 to 30Vdc, 24Vdc nominal

<3W @12Vdc

Vacuum supply

At least 38.1 cm (15 inches) Hg

Interfaces

Serial: RS485

Environmental

Operating temperature 10 to 40°C Storage temperature -20 to 50°C

# **W2216 Wall Plate Specification**

304 Stainless steel face plate

Width 180mm

Height 90mm

Plastic back box

Width 135mm

Height 75mm

Depth 38mm

### **Ordering Information**

- S1412 Continuous Monitoring Particle Counter including R1510 particle counter
- M1412 Mounting Plate for S1412
- W2216 Wall plate for S1412
- U1412-3 Vacuum/Power/Communication umbilical for S1412, 1.5m length
- R1510 particle counter without enclosure

# **Control Assemblies**

- P4050-4G Power and Vacuum Control Assembly for up to 4 S1412 particle counters
- P4050-2G Power and Vacuum Control Assembly for up to 2 S1412 particle counters







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