

# CLIMET®

## CI-3100 TRIDENT SERIES™ AIRBORNE PARTICLE COUNTERS 1 CFM FLOW RATE, 2 - CHANNELS



The CLIMET Trident Series™ of particle counters provides a Sample Data Memory Buffer, an optional RH & Temp Probe, and is the industry's first to provide Power-over-Ethernet (PoE+) in a particle counter with an integrated vacuum pump.

### FEATURES & BENEFITS

- ✓ Continuous Monitoring in Critical Areas
- ✓ High Accuracy & Unsurpassed Repeatability Measurement
- ✓ 10,080 Sample Memory Buffer
- ✓ VHP Compatible
- ✓ PoE+ or A/C Versions Available
- ✓ WiFi Version Available
- ✓ HEPA Filtered Exhaust
- ✓ Seamless Stainless Steel Enclosure
- ✓ Remotely Controlled and a Rear Panel ON/OFF Button
- ✓ User Enabled/Disabled Alarm Light Ring
- ✓ Rear Output Contacts for a dedicated Light Tower
- ✓ Optional RH/Temp Probe
- ✓ New Proprietary Diagnostics Mitigate Deviation Reports and Failure Investigations
- ✓ Compatible with LIMS and other FMS Software Packages
- ✓ ISO 21501-4, ISO 14644-1/2, EU GMP, Annex 1, 21 CFR Part 11



### AVAILABLE CONFIGURATIONS

CI-3100 Trident - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_  
Interface                      Voltage                      Size Sensitivity                      Flow Rate

#### INTERFACE OPTIONS

- 24 = AC Power with Ethernet Networking
- 25 = Power over Ethernet (PoE+)
- 26 = WiFi & AC Power

#### VOLTAGE OPTIONS

- 0 = PoE
- 1 = 115 VAC USA
- 2 = 230 VAC EURO
- 3 = 230 VAC UK

#### SIZE SENSITIVITY OPTIONS

4\* = 0.5 / 5.0 µm

#### FLOW RATE OPTIONS

6\* = 1.00 CFM with HEPA Filtered  
External Exhaust

\* = most popular versions

**Custom Configurations Upon Request.**  
**For more information, please contact**  
**a member of our Sales team.**



UNITED KINGDOM

+44 (0)1604 493200  
info@optical-sciences.co.uk  
www.optical-sciences.co.uk

IRELAND

+353 (0)59 91 82948  
info@optical-sciences.ie  
www.optical-sciences.ie

# CLIMET®

## CI-3100 TRIDENT SERIES™ AIRBORNE PARTICLE COUNTERS 1 CFM FLOW RATE, 2 - CHANNELS



### RELIABILITY, ACCURACY & SUPPORT

The CI-3100 Trident Series™ of particle counters are engineered and manufactured with only the highest quality materials. This ensures a long product life-cycle, and up to decades of reliable use. Moreover, we provide calibration support services at OptiCal Sciences Limited for all CLiMET devices over their lifetime. The CLiMET CI-3100 Trident Series™ provides highly accurate particle counts over time.

CLiMET internal audits confirm that units returned for calibration have an "In Tolerance" rate of more than 98%. This includes some units that have been manufactured over a decade ago. Simply, CLiMET particle counters are designed, tested and calibrated with very tight tolerances to exceed industry standards. Over a decade of count efficiency testing has demonstrated that a properly calibrated particle counter produces good count efficiency, even after more than a decade of operation!

### LOWEST TOTAL COST OF OWNERSHIP

Not all particle counters are equal. The initial purchase price, cost of calibrations, cost of consumables, out of warranty repairs and product life-cycle all factor into calculating the Total Cost of Ownership (TCO). Other intrinsic factors include assurance, reliability, accuracy, application support, and superior customer service. These make CLiMET the unsurpassed leader in the manufacture of particle counters for cleanroom monitoring, validation and certification.

### RECOMMENDED CALIBRATION FREQUENCY

Every 12 months with monodisperse polystyrene spheres traceable to NIST.



**Custom Configurations Upon Request.  
For more information, please contact  
a member of our Sales team.**



UNITED KINGDOM

+44 (0)1604 493200  
info@optical-sciences.co.uk  
www.optical-sciences.co.uk

IRELAND

+353 (0)59 91 82948  
info@optical-sciences.ie  
www.optical-sciences.ie

# CLIMET®

## CI-3100 TRIDENT SERIES™ AIRBORNE PARTICLE COUNTERS 1 CFM FLOW RATE, 2 - CHANNELS



### SPECIFICATIONS

#### Performance:

**Flow Rate Control:** Electronic, automatic closed loop

**Particle Channel Sizes:** 0.5 and 5.0 microns on 2-channels (please contact us for other size requirements and custom configurations)

**Concentration Limit:** 1.0 x 10<sup>6</sup> Particles/FT<sup>3</sup> (35.3 X 10<sup>6</sup> Particles/M<sup>3</sup>)

**Resolution:** Exceeds requirements of ISO 21501-4 of 15% (4-10% typical)

**Count Efficiency:** 50% Count Efficiency exceeds ISO 21501-4 of ±10% @ 0.5µm  
100% Count Efficiency of ±10% @ 0.8µm per ISO 21501-4

**Max. False Count:** 1.00 CFM: 7.1 / CM (95% UCL) per ISO 21501-4  
0.10 CFM: 71 / CM (95% UCL) per ISO 21501-4

**Optics:** Rhodium plated metal elliptical mirror (extreme durability and resistant to contamination)

**Laser Diode:** Optimal balance of long life, stability and resolution for added accuracy

**Cleaning:** Compatible with common cleaning and sterilization procedures, including VHP

**Vacuum Source:** Power efficient internal vacuum source

**RH/Temp output:** 6-pin connector (Compatible with Climet RH/Temp probe)

**Memory:** 10,080 Samples (7 days of storage), date and time stamped

#### Accessories Included:

Zero Count Filter, Manual and External Exhaust Fitting

#### Optional Extras:

Stainless Steel Isokinetic Probes, Tubing, Probe Stands, High Pressure Diffusers, Software, Validation Documentation, IQ/OQ, Operator Training, Customized Cabling, Power Injector, RH/Temp Probe, Alarm Tower and other accessories sold separately.

#### LED Status Indicators:

LED Power, Sample, Alarm, Count, Laser Status, Flow Status, Network FTP, Network Time, Service Required and Network Link

#### Environmental:

**Operating Temperature:** 32 - 100°F, 0 - 37.8°C

**Dimensions:** 6.125" (W) x 4" (H) x 11.125" (D) (15.558cm x 10.16cm x 28.258cm)  
0 - 100% relative humidity, non-condensing

#### Compliance:

ISO 21501-4; ISO 14644-1; EU GMP; Annex 1; FS-209E; JIS 9921; and FDA 21 CFR Part 11 with software

**Custom Configurations Upon Request.**  
**For more information, please contact**  
**a member of our Sales team.**



UNITED KINGDOM

+44 (0)1604 493200

info@optical-sciences.co.uk

www.optical-sciences.co.uk

IRELAND

+353 (0)59 91 82948

info@optical-sciences.ie

www.optical-sciences.ie