CI-3100 Trident RS Series
Remote Sensor Airborne Particle Counters
1 CFM Flow Rate
2-Channels 0.5/5.0 µm

Continuous Monitoring in Critical Areas

High Accuracy & Stability of Measurement

10,080 Sample Memory Buffer

Fully Compatible with VHP

PoE or 24 VDC Power

Remotely Controlled with web interface, Modbus over TCP/IP, or ON/OFF Button

User Enabled/Disabled Light Ring

Output Contacts for a dedicated Light Tower

Climet RH/Temp Probe Optional

Proprietary Diagnostics Further Mitigate Deviation Reports and Failure Investigations.

Easy FTP setup for data management, and compatible with LIMS / other FMS Software Packages

ISO 21501-4
ISO 14644-1/2
EU GMP, Annex 1
21 CFR Part 11

When Accuracy Matters! ™

Innovation

The Trident RS Series provides ease of use and reliability, and is specifically designed for continuous monitoring in pharmaceutical and other critical applications. It has a 10,080 Sample Data Memory Buffer, 10/100 Fast Ethernet Port, Modbus over TCP/IP, web interface, an optional RH and Temp probe, and is powered by either 24 VDC or Power-over-Ethernet (PoE+). Additional features include: ON/OFF button, fully integrated Light Ring for visual alerts, output contacts for a dedicated Light Tower, and more.

Substantially Mitigate Deviation Reports & Investigations

The **CI-3100 Trident RS** is engineered and manufactured with only the highest quality materials. This ensures a long product life-cycle, and up to decades of reliable use. Our reputation, and where we really excel, is providing highly accurate particle counts over time. Climet internal audits confirm that units returned that are 10 years old or less pass their interval calibration 99.5% of the time. The Trident RS sensors are manufactured to substantially mitigate or eliminate deviation reports and investigations due to interval calibration out-of-tolerance conditions.

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, product life-cycle, and labor associated with failure investigations all factor into calculating the Total Cost of Ownership (TCO). Other intangible factors include assurance, reliability, accuracy and stability of measurement, application support, and superior customer service. These make Climet the unsurpassed leader in the manufacture of particle counters for cleanroom monitoring, validation, and certification.

Custom Engineered Solutions

If you have a specific technical requirement, please contact us. We specialize in customizing our products to fit your needs.

Applications Include:

Cleanroom Monitoring & Validation
Medical Device Manufacturing
Pharmaceutical Manufacturing
Hospitals
Food & Beverage Processing
Aerospace Assembly
Pharmaceutical Compounding
Cosmetic Manufacturing

CLiMET®
CLIMET INSTRUMENTS COMPANY

CI-3100 Trident RS Series Specifications

Performance	Flow Rate Control:	**Critical orifice with External Vacuum @ 15" Hg minimum**
	Particle Channel Sizes:	***0.5 and 5.0 microns on 2-channels***
	Concentration Limit:	**1.0 X 10^6 Particles/Ft^3 (35.3 X 10^6 Particles/M^3)**
	Resolution:	**Exceeds requirements of ISO 21501-4 of ≤ 15% (4-6% typical)**
	Count Efficiency:	**50% Count Efficiency exceeds ISO 21501-4 of ±10% @ 0.5µm**
		100% Count Efficiency @ ±10% @ 0.8µm per ISO 21501-4
	Max. False Count:	**1.00 CFM: 7.1 / M^3 (95% UCL) per ISO 21501-4**
	Optics: **Rhodium plated metal ellipsoidal 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**	
	RH/Temp output: **Compatible with Climet RH/Temp probe**	
	Memory: **10,080 Sample Memory Buffer (7 days of storage), date and time stamped**	
Accessories Included	IQ/OQ Docs, manual, USB cable, mounting bracket, and Quick Start Guide	
Alarms	Front panel LEDs, Light Ring, and output for the Climet Trident Light Tower	
Other Available Accessories	Stainless steel isokinetic probes, tubing, probe stands, software, validation documentation, custom cabling, power injector, Climet RH/Temp probe, Trident alarm tower, and other accessories sold separately.	
LED Status Indicators	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 **Storage Temperature**: 32-155° F, 0-68.3° C **Dimensions:** 6.4" (W) x 4" (H) x 5.9" (D) (16.256 cm x 10.16 cm x 14.986 cm) **Weight**: 3.4 Lbs. (1.54 Kg) **Humidity**: 0%-95% non-condensing	
Compliance	ISO 21501-4; ISO 14644-1 and -2; EU GMP, Annex 1; FS-209E; JIS 9921; & FDA 21 CFR Part 11 with software	

CI-3100 Trident RS - _____ - _____ - _____ - _____

Data Power Size Sensitivity Flow Rate

DATA COMMUNICATIONS

7 = **Wired Ethernet**

POWER OPTIONS

0 = **PoE+** with No Power Injector
1 = **PoE+** with injector + US power cord
2 = **PoE+** with injector + EU power cord
3= **PoE+** with injector + UK power cord
4 = **24 VDC**

SIZE SENSITIVITY OPTIONS

5 = **0.5 / 5.0 µm (Compatible with Vaisala RH/Temp Probe)**

FLOW RATE OPTIONS

8 = 1.00 CFM

Recommended calibration frequency, every 12 months with monodisperse polystyrene spheres traceable to NIST.

We value the opportunity to work with you.

Further technical information and questions, please contact us.

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