

Specifications

Channel Sizes	CI-150 Series, CI-450 Series & CI-750 Series CI-1050 Series	0.3 μm, 0.5μm, 1μm, and 5μm * 0.5 μm, 1μm, 3μm, and 5μm *
Size Calibration	< ±10% with internal pulse height analyzer (PHA) in compliance with ISO 21501-4.	
Size Resolution	±4% to ±8% typical. Substantially exceeding ISO 21501-4 of ≤ ±15%.	
Count Efficiency	50% Count Efficiency (a measure of accuracy): ≤ ±10% to Climet standards. Substantially exceeding ISO 21501-4 of ≤ ±20%. 100% Count Efficiency (a measure of laser alignment): < ±10%. In compliance with ISO 21501-4.	
False Count Rate	Equal to or better than ISO 21501-4 specifications.	
Flow Rate	CI-150 Series CI-450 Series CI-750 Series CI-1050 Series	1 CFM (28.3 LPM) ± 5% per ISO 21501-4 50 LPM ± 5% per ISO 21501-4 75 LPM ± 5% per ISO 21501-4 100 LPM ± 5% per ISO 21501-4
Sample Volume Uncertainty and Vacuum Source	Flow Control and internal mass flow meter ensures compliance with ISO 21501-4 Flow Rate tolerance of ± 5%. Alarm triggers if flow rate is out of compliance. Patented blower technology provides very quiet operation even at high flow rates, and it is also very energy efficient. Sample Volume is user-adjustable in cubic meters, cubic feet, or liters.	
Exhaust	HEPA filtered exhaust uniquely factory tested to Climet standards to ensure no leaks and certified to ISO Class 3 emissions. Substantially exceeding ISO standards and recommendations.	
Sanitation	Compatible with all standard cleanroom sanitation and sterilization procedures, including Vaporized Hydrogen Peroxide (VHP).	
Data Interface Options	Your choice of RS-232, Ethernet Modbus, Wi-Fi, and USB. Varies by model.	
Laser and Collection Optics	Patented metal ellipsoidal mirror uniquely minimizes particle shape (morphology) on sizing. No plastic laser or collection optics ensures no calibration drift and the industries highest accuracy. Also, improves product longevity and Return on investment (ROI).	
Mirror Plating	Rhodium plated metal ellipsoidal mirror uniquely ensures the highest resistance to contamination and decomposition when compared to chromium and other inexpensive metals. Also, improves product longevity and ROI.	
Enclosure	Stainless steel enclosure, which unlike plastics, does not potentially contribute to contamination and bio-contamination of the clean area. VERY rugged internal design that is impact resistant, and ensures many years of reliable operation.	
Display	Large touchscreen display and large lettering. VERY quick response between screens—No frustrating delays.	
Alarms	Triggers at (i) Counts (User defined “Alert” and “Action” levels), (ii) Laser Status, and (iii) Flow Rate Deviation.	
Programmable	Four Security Levels, 30 Programs, 20 User ID’s plus administrator with password security, 100 location IDs, and up to 3,000 samples. All models uniquely have Unit-to-Unit cloning.	
Calibration Enforcement	Available on some models. Ability to set calibration date so that instrument cannot be turned-on by users with lower security settings. This eliminates deviation reports and investigations due to use of equipment with expired calibration.	
Printer	Fully integrated thermal printer. No warts or plastic bubbles on the outside exterior that are difficult to sanitize.	
Battery / Electrical	1 CFM 6 hours with continuous sampling ** 75 LPM 4 hours with continuous sampling ** Battery Recharge Time: Single battery at 3.5 to 4 hours (typical). Most energy efficient portable on the market! Wall power (Universal 100-240 VAC Input) with fully integrated battery charger.	
Dimensions & Weight	8.65” x 8.5” x 9.5” = 698.5 cubic inches. The smallest portable on the market! 11 Lbs. without a battery, and only 14.25 Lbs. with a battery. The lightest portable on the market!	
Environmental	Temperature: 0-36°C (32-97°F) Humidity: 0-90% relative humidity, non-condensing	
Included Accessories	Internal thermal printer, internal battery charger, battery, choice of stainless steel or light blocker isokinetic probe, Bev-A-Line tubing, zero count filter, two rolls of thermal paper, cloning cable, IQ/OQ documentation, printed manual, external exhaust fitting (as appropriate), and Flash Drive on all USB models.	
Options	Carrying case, probe stand, filter scanning probe, spare isokinetic probe, spare battery, validation documentation, external battery charger (comes with internal battery charger), monitoring software, and high pressure diffusers (for sampling high pressure gases).	

* Custom channel selections can be made at time of order in a range up to 25μm, or higher, and may need to sacrifice the lowest particle channel
** Battery Operation: Continuous sampling is calculated with maximum power drain, and assumes blower and laser are engaged for the entire cycle. Typical usage will be significantly better.
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Commitment to Quality



CLIMET®
INSTRUMENTS COMPANY

Celebrating Over 50 Years In Business!

Climet CI-x5x Series
Portable Airborne Particle Counters

Rev. 1.1 (May 2015)



98% In-Tolerance Interval Calibration Yield

Fewer deviation reports and investigations significantly improves Return on Investment (ROI), and reduces Cost of Poor Quality (CoPQ).

Energy Efficient Single Battery Operation

Provides users the longest operational run times, and shortest recharge times in the industry... all on a single battery!

Fewer batteries also means a lower overall total cost of ownership!

Unparalleled Accuracy & Reliability

No plastic laser or collection optics, and a patented rhodium-plated metal ellipsoidal mirror uniquely provides immunity to calibration drift, and also minimizes the effect of particle shape (morphology) on sizing! Our rhodium-plated mirror is resistant to contamination, decomposition, and corrosion providing users an extended product life.

From the Innovator, Not An Imitator!

Climet revolutionized the particle counter industry by pioneering the first battery powered portable particle counter in 1993. Since then, our competitors have modeled their instruments after the ClimeT Gold Standard! Even today, ClimeT offers **the smallest, lightest and quietest portable particle counters** of all major competitors. More importantly, our instruments are built to last the test of time. Engineered with only the highest quality materials, users can expect up to decades of reliable operation.

Other Innovations & Features...

- ✓ **Compliant with all standards** including, but not limited to ISO 14644-1/2, ISO 21501-4, 21 CFR Part 11, GMP Annex 1, and others.
- ✓ Pioneered **Unit-to-Unit Cloning** of instrumentation settings, as well as USB Cloning.
- ✓ Pioneered **HEPA filtering** and high flow rates of 50 LPM, 75 LPM, and 100 LPM.
- ✓ **Flexible Data Interface Options:** Wireless, Fast Ethernet Modbus, RS-232, and USB. Varies by model.
- ✓ **Laser Diode** is an optimal mix of long life, stability, and high resolution. A stable laser diode is important as jitter causes false high counts. The laser must also provide a narrow response to particles in order to provide excellent size resolution. The unique and patented design of ClimeT's collection optics, laser sensor module, and laser diode selection provide unsurpassed accuracy.
- ✓ **Fast display response** when switching between screens eliminates user frustration.
- ✓ The **quietest and most energy efficient** vacuum pump.
- ✓ Rugged, durable and built to last — all ClimeT products are **proudly manufactured in the United States of America**.

