Met One Instruments, Inc.

BT-610 Bench-Top Particle Counter

The BT-610 is a compact battery operated particle counter with six selectable size channels, built-in printer, housed in a portable stainless steel case. Flow rate is 0.1 cfm (2.83 lpm) and is maintained with volumetric flow control for improved accuracy.

Key Features:

Simple Operation
The BT-610 has a large size display with very large characters, audible alarm, and internal printer that work together to verify particulate levels. If the particle count exceeds a pre-set limit, the audible alarm will beep, the screen display will flash, and the printer will print the alarm value. Two programmable count alarm limits may be set.

Convenient for Compliance
Comply with 21 CFR Part 11 with a password feature to prevent unauthorized changes to the user settings . ISO 21501-4 calibration is available for ISO 14644-1 compliance.

User Selectable Sizes
Each of the six channels may be individually set by the operator from 0.3 to 10 microns. Custom calibrations are not required.

Data Storage and Connectivity
The BT-610 stores over 8,000 sample events. Sample history events can be viewed or printed and downloaded to a computer using Comet software or simple ASCII terminal commands. Connectivity is built-in for both digital (RS-232, RS-485) and analog output (0-5 VDC). The BT-610 also includes USB interface, and a Memory Stick port.

Printer
The Printer has two modes of operation. Print Sample: prints sample data at the end of each sample including alarm, date, time and location. Recall Data: prints all sample data from first selected date and time to second selected date and time.

Portable Desk Top
The BT-610 provides 6 channels, built-in printer and battery operation in a compact stainless steel case. The built-in battery provides 24 hours of typical (intermittent) operation and 8 hours continuous operation. Connect the AC adapter/charger for longer operation and battery charging.

Temperature / Relative Humidity Option
A plug-and-play option can immediately add ambient temperature and relative humidity capabilities to displayed and logged data.

Applications

- Clean-room Monitoring
- Medical Device Manufacturing
- Filter Testing
- Hospitals
- Food / Beverage
- Aerospace Assembly
- Paint Booths
- Cosmetic Manufacturing

Interface

Display	20 character x 4 line LCD
Keyboard	8 key membrane type

Performance PM

Ranges	0.3µm - 10µm, 6 channels
Calibrated Sizes	0.3µm, 0.5µm, 1.0µm, 2.0µm 5.0µm and 10µm
User Size Settings	0.1µm steps from 0.3µm - 2.0µm
	0.5µm steps from 2.0µm - 10µm
Concentration Range	0 – 3,000,000 particles per cubic foot (105,900 particle/L)
Accuracy	± 10% to calibration aerosol
Sensitivity	0.3 µm
Flow Rate	0.1 cfm (2.83 lpm)
Sample Time Adjustable	1 to 999 seconds
Hold Time Adjustable	0 to 999 seconds

Electrical

Light Source	Laser Diode, 90mW, 780 nm
Power	14.8V Li-Ion self-contained battery pack – Provides for 8 hours continuous use. Full recharge approximately 3 hours.
AC Adapter/Charger	Li-Ion Charger, 100 – 240 VAC to 16.8 VDC @ 1.8A USB,
Communications	RS-232 or RS-485
Standards	Meets ISO 21501-4. CE marked. ISO 9001 manufacturing facility.

Physical

Weight	8 lb - 1.6 oz (3.67 kg)
Size	Height = 8.75" (22.2 cm) With Handle = 10.25"(26.0 cm)
	Width = 6.75" (17.1 cm) Depth = 8.5" (21.5 cm)

Environmental

Operation Temperature	0° to +40°C
Storage Temperature	-20° to +60°C *Specifications are subject to change at any time.*

SUPPLIED ACCESSORIES
Operation
Manual USB
Cable Comet
Software
Particle View Software
Battery Charger
Iso-kinetic Sample Probe
Zero Particulate Filter
Printer Paper - 2 Rolls
Calibration Certificate

OPTIONAL ACCESSORIES

RH & Temperature Probe
Flow Meter
Serial Cable
Particle View RT Software
ISO 21501-4 Calibration

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