

BT-645

BENCHTOP PARTICLE COUNTER

KEY FEATURES:

- Real-Time Monitoring
- Simple Operation
- Rugged Design
- Built-in Data-Logger
- Purge Air System
- Low Power Consumption

The BT-645 Benchtop Particle Counter has been designed to continuously measure and record particulate information for indoor work place and public place environments.

Optical Sensor

A laser optical sensor is used to detect and measure particulate concentrations up to 100 milligrams per cubic meter. The continuous flow optical sensor is combine with purge air to

ensure accurate measurements in adverse environments.



BT-645 w/SCC-112 PM2.5 Sharp Cut Cyclone

APPLICATIONS:

- Public & Workplace Monitoring
- Industrial/Occupational Hygiene
- Indoor Air Quality



Rugged Design

The optical sensor, matched electronics and back-lit display are enclosed in a rugged metal enclosure to protect the instrument from normal daily use.

Data Storage

The internal data-logger will store over 28,000 samples. Sample history events can be viewed on the display or downloaded to a computer using Comet software.

Battery Operation

The internal battery pack provides over ten hours of continuous operation. Battery recharge time is approximately 2.5 hours.

Optional Inlets

The standard unit is supplied with a TSP inlet. Optional sampling inlets are available for PM_{2.5}, PM₁, and PM₁₀.

Interface

Display 20 character x 4-line LCD
Keyboard 6-key membrane type

Performance

Concentration Range 0 to 100 mg/m³ (0 to 100,000 µg/m³)
Sensitivity 1 µg/m³
Accuracy 5% traceable to standard with 0.6 µm PSL
Measuring Time 1, 5, 10, 15, 30 and 60 minutes
Flow Rate 2 LPM

Note: Measurement accuracy requires use of appropriate K-factor for the material being measured.

Electrical

Light Source Power Laser diode, 5 mW, 670 nm
Battery Life 14.8V Li-ion (Lithium Ion) battery pack
AC Adapter/ Charger Over 10 hours continuous operation
Communications Li-ion battery charger, 100 – 240 VAC, 50/60Hz to 16.8 V @ 1.8 A R-S232, USB
Data Storage Over 28,000 samples

Physical 3.7 lbs (1.7 kg)
Weight: Height = 4.25" (10.8 cm)
Size: Width = 7.44" (18.9 cm) Thickness = 3.25" (5.4 cm)

Environmental

Operation Temperature 0° to +50°C
Storage Temperature -20° to +60°C
Relative Humidity 90% (non-condensing)

SUPPLIED ACCESSORIES

User Manual
USB Cable
Communications Software (Comet)
AC Adapter / Battery Charger
Calibration Certificate
Zero Filter Assembly
Li-ion Smart Charger w/ Power Cord
Sample Inlet (TSP)

OPTIONAL ACCESSORIES

PM2.5 Sharp Cut Cyclone
PM10 Sharp Cut Cyclone
PM1 Sharp Cut Cyclone
Custom Serial Cable

NOTE: Not recommended for continuous outdoor use.

Specifications are subject to change at any time.

