



# LIGHTHOUSE

WORLDWIDE SOLUTIONS



## BOULDER COUNTER

### AIRBORNE PARTICLE COUNTER

The **BOULDER COUNTER** portable airborne particle counter offers a sensitivity of 5 microns at a flow rate of 1.0 CFM (28.3 LPM) and a wide dynamic range of 5 to 100 microns.

With its 5.7-inch (14.47 cm) color touch screen, the **BOULDER COUNTER** is easy to configure and operate. It can store 3,000 records of particle count data from 6 channels and environmental data from up to 4 sensors (4-20 mA). All data can be quickly and reliably transferred to a computer or printed on its built-in thermal printer.

Demonstrating its versatility, the **BOULDER COUNTER** can be used as a portable instrument or integrated into a facility monitoring system.

Designed and built by  
**Lighthouse - a name you can trust.**

Lighthouse is an ISO 9001:2000 Registered company

[www.golighthouse.com](http://www.golighthouse.com)

### Features:

- ★ 5 - 100  $\mu\text{m}$  @ 1.0 CFM (28.3 LPM)
- ★ Simultaneous Display of up to 6 Particle Sizes
- ★ Meets JIS Standards
- ★ 5.7-inch (14.47 cm) Color Touch Screen
- ★ Removable, Rechargeable Li-Ion Battery
- ★ 3,000-sample Data Storage Memory
- ★ Up to 4 Environmental Sensors (4-20 mA)
- ★ 200 Alphanumeric Location Labels
- ★ Thermal Printer / User Definable Printouts
- ★ Data Reported in Normalized Counts:  
FS-209E, and ISO-14644-1 Formats
- ★ Easily Configured Interface with Zoom Capability
- ★ Integrated Alarm and External Alarm Connection
- ★ Data Easily Transferred to a Computer

### Benefits:

- ★ 2 Year Warranty
- ★ User-Friendly Interface
- ★ Low Cost of Ownership
- ★ Easy-to-Read Display
- ★ International Support
- ★ Small Footprint

### Applications:

- ★ Aerospace Flight and Space Hardware Manufacture
- ★ Aerospace Precision Engine Manufacture
- ★ Flat Panel Display Manufacturing
- ★ Medical Device Manufacturing
- ★ Automotive Precision Machining and Paint



Easy Loading  
Thermal Printer



User Removable  
Rechargeable  
Li-Ion Battery



Zoom Screen  
Functionality



User Friendly  
Configuration



Alphanumeric  
Location Labels



Multiple  
Cleanroom  
Standard Reports  
via Printer



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## Specifications:

<b>Size Range:</b>	5 - 100µm
<b>Channel Sizes:</b>	Standard: 5, 10, 25, 40, 50, 100µm
<b>Counting Efficiency:</b>	50% @ 5.0µm; 100% for particles > 7.5µm (per JIS)

<b>Flow Rate:</b>	1.0 CFM (28.3 LPM)
<b>Laser Source:</b>	Laser Diode
<b>Zero Count Level:</b>	<1 count / 5 minutes (per JIS)
<b>Concentration Limits:</b>	500,000 Particles/ft <sup>3</sup> @5% Coincidence Loss
<b>Calibration:</b>	NIST Traceable
<b>Count Modes:</b>	Automatic, Manual, Beep, Concentration, Cumulative/Differential, Real-time (with <i>LMSNet</i> , <i>LMS Express RT/RT+</i> )
<b>Data Storage:</b>	3,000 Sample Records (Rotating Buffer) which include particle and environmental data, locations and times
<b>Communication Modes:</b>	RS-232 via RJ-45 to PC, RS-485/MODBUS
<b>Supporting Software:</b>	<i>LMS XChange</i> , <i>LMS Express</i> , <i>LMS Express RT</i> and <i>RT+</i> ; <i>LMSNet</i>
<b>Environmental Sensors:</b>	Optional (up to 4): Temperature/Relative Humidity, Air Velocity, Differential Pressure, or others
<b>Touch Screen Display:</b>	5.7" (14.47 cm) Color, 320x240 pixels
<b>Printer:</b>	Built-in Thermal Printer
<b>Reports:</b>	Normalized Counts, FS-209E, ISO-14644-1
<b>Alarm:</b>	Integrated Alarm, External Alarm Connector; Alarms on Counts or Low Battery
<b>Enclosure:</b>	Stainless Steel
<b>Sample Output:</b>	Internally Filtered to HEPA Standards (>99.997% @ 0.3µm)
<b>Vacuum Source:</b>	Internal Pump, Automatic Flow Control
<b>Power:</b>	100-240 VAC, 50-60 Hz
<b>Battery:</b>	Li-Ion, Removable & Rechargeable
<b>Dimensions:</b>	9.96" (l) x 8.0" (w) x 10.16" (h) [25.3 x 20.32 x 20.81 cm]
<b>Weight:</b>	With Battery: 14.9 lbs (6.8 kg) Without Battery: 12.95 lbs (5.9 kg)

## Environmental Conditions

<b>Operating:</b>	50°F to 104°F (10°C to 40°C) / 20% to 95% non-condensing
<b>Storage:</b>	14°F to 122°F (-10°C to 50°C) / Up to 98% non-condensing

## Accessories

<b>Included:</b>	Operating Manual on CD; Isokinetic Sample Probe; Purge Filter; Removable, Rechargeable Li-Ion Battery; Power Cable and Spare Fuse; <i>LMS XChange</i> Software; Printer; Thermal Printer Paper
<b>Optional:</b>	Printed Operating Manual; <i>Network Adapter</i> ; <i>Wireless Network Adapter</i> ; Carrying Case with Wheels; Cleanroom Cart; Temperature/Relative Humidity Probe; Air Velocity Probe; Differential Pressure Probe; High Pressure Diffuser; Spare Li-Ion Battery; External Battery Charger; <i>LMS Express</i> , <i>Express RT</i> and <i>RT+</i> Software; <i>LMSNet</i> Software

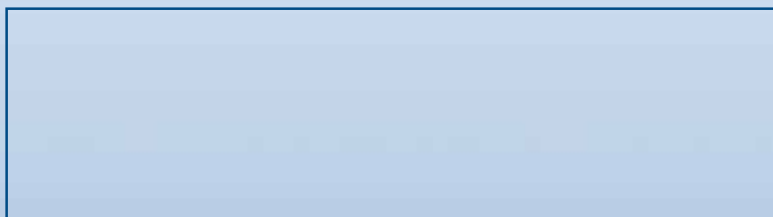
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Lighthouse Worldwide Solutions reserves the right to change specifications without notice.  
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