



# HANDHELD PARTICLE COUNTERS

The ergonomically designed and lightweight Lighthouse **HANDHELD 2016**, **3016** and **5016** particle counters feature 0.2, 0.3 and 0.5 $\mu$ m sensitivities and are the most advanced handheld particle counters on the market.

Providing up to 6 particle size channels of simultaneous counting, Lighthouse **HANDHELD** Particle Counters can display cumulative and differential particle count data as well as Temperature/Relative Humidity data on the fast and easy to read color touch screen. Removable batteries and an optional charger help to maximize the **HANDHELD**'s uptime. Data is very easily downloaded using the Lighthouse Data Transfer Software.

The **HANDHELD** can be used as a mobile particle monitor or become a part of a large facility monitoring and management system.

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

Lighthouse is an ISO 9001:2008 Registered Company.

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

## Features:

- ★ Handheld 2016: 0.2 - 2  $\mu$ m
- ★ Handheld 3016: 0.3 - 25  $\mu$ m
- ★ Handheld 5016: 0.5 - 25  $\mu$ m
- ★ 0.1 CFM (2.83 LPM) Flow Rate
- ★ View 6 Particle Sizes Simultaneously
- ★ Designed for ISO 21501-4 Compliance: Unit-to-Unit Accuracy and Repeatability
- ★ Bright 3.5" (8.89 cm) Color Touch Screen Display
- ★ Removable / Rechargeable Li-Ion Battery
- ★ Large Memory for Storing Data (3,000 samples)
- ★ Concentration Limit - 4,000,000/ft<sup>3</sup>
- ★ Temperature/Relative Humidity Probe Included
- ★ Alphanumeric Location Labels
- ★ Test Wizard for Cleanroom Pass/Fail Reports: FS-209E, ISO-14644-1 or EU GMP Annex 1
- ★ Easily Configurable Interface with Zoom Capability
- ★ Internal Audible Alarm
- ★ Ergonomically Designed
- ★ Lightweight
- ★ Open Architecture Connectivity with OPC Server

## Benefits:

- ★ 2 Year Warranty
- ★ User Friendly Interface
- ★ International Support
- ★ Low Cost of Ownership



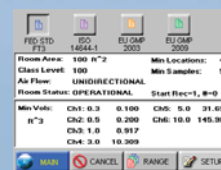
Backlit Touchscreen Interface



Removable Rechargeable Li-Ion Battery



One-handed Operation with Start & Stop on Handle



Reports Screen



Removable Temp/RH and Isokinetic Probe



Easily Download Data to PC



## Specifications

|                             | 2016  | 3016  | 5016  |
|-----------------------------|---|---|---|
| <b>Size Range:</b>          | 0.2 - 2.0 µm  | 0.3 - 25.0 µm   | 0.5 - 25.0 µm   |
| <b>Channel Sizes:</b>       | 0.2, 0.3, 0.5, 0.7, 1.0, 2.0 µm                     | Standard: 0.3, 0.5, 0.7, 1.0, 2.0, 5.0 µm<br>Standard: 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 µm<br>Standard: 0.3, 0.5, 0.7, 1.0, 2.5, 5.0 µm<br>Standard: 0.3, 0.5, 1.0, 2.5, 5.0, 10.0 µm<br>Optional: 0.3, 0.5, 1.0, 5.0, 10.0, 25.0 µm | Standard: 0.5, 0.7, 1.0, 3.0, 5.0, 10.0 µm<br>Optional: 0.5, 1.0, 3.0, 5.0, 10.0, 25.0 µm |
| <b>Counting Efficiency:</b> | 50% @ 0.2 µm; 100% for particles > 0.3 µm (per JIS) | 50% @ 0.3 µm; 100% for particles > 0.45 µm (per JIS)  | 50% @ 0.5 µm; 100% for particles > 0.75 µm (per JIS)                                      |

|                               |   |
|-------------------------------|---|
| <b>Flow Rate:</b>             | 0.1 CFM (2.83 LPM)  |
| <b>Laser Source:</b>          | Extreme Life Laser Diode with >20 Years MTTF  |
| <b>Zero Count Level:</b>      | <1 count / 5 minutes (per JIS)  |
| <b>Concentration Limits:</b>  | 4,000,000 Particles / ft <sup>3</sup> @ 5% Coincidence Loss   |
| <b>Calibration:</b>           | Meets ISO 21501-4 Calibration using NIST Traceable PSL Spheres, DMA and Condensation Particle Counter |
| <b>Count Modes:</b>           | Automatic, Manual, Beep, Concentration, Cumulative/Differential                                       |
| <b>Data Storage:</b>          | 3,000 Sample Records, Rotating Buffer (includes particle and environmental data, location and time)   |
| <b>Communication Modes:</b>   | RS-232 via RJ-45 to a PC or an Optional Printer   |
| <b>Supporting Software:</b>   | LMS XChange; LMS Express; LMS Express RT; LMS Pharma; LMS Standard; CRQWin                            |
| <b>Environmental Sensors:</b> | Temperature/Relative Humidity Probe: 32-122°F(0-50°C) ±1°F (0.5°C), 15-90% ± 2% RH                    |
| <b>Touch Screen Display:</b>  | 3.5" (8.89 cm), Color TFT   |
| <b>Reports:</b>               | FS-209E, ISO-14644-1 & EC GMP   |
| <b>Alarms:</b>                | Internal, Adjustable Alarm Buzzer. Alarms on Counts, Low Battery or Sensor Failure                    |
| <b>Sample Inlet:</b>          | Isokinetic Sampling Probe   |
| <b>Sample Output:</b>         | Internally Filtered to HEPA Standards (>99.997% @ 0.3 µm)   |
| <b>Vacuum Source:</b>         | Internal Pump, Automatic Flow Control   |
| <b>Enclosure:</b>             | High Impact Injection Molded Plastic  |
| <b>Power:</b>                 | 100-240 V, 50-60 Hz   |
| <b>Battery:</b>               | Li-Ion, Removable & Rechargeable  |
| <b>Dimensions:</b>            | 8.75" (l) x 5.0" (w) x 2.5" (h) [22.23 x 12.7 x 6.35 cm]  |
| <b>Weight:</b>                | 2.2 lb (1kg)  |
| <b>Languages:</b>             | English (U.S.), Deutsch, Español, Italiano, Français  |

## Environmental Conditions

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

## Accessories

**Included:** Operating Manual on CD; Removable Battery; Direct Mount Isokinetic Sample Probe; Purge Filter; Temperature/Relative Humidity Probe; Power Supply; Power Cord; LMS XChange and LMS Express Software

**Optional:** Carrying Case; Isokinetic Sample Probe with 6 ft. tubing (extends Isokinetic sample input); Additional Li-Ion Batteries; External Battery Charger w/ AC & Car Adapter; Thermal Printer and Cable; Mini Manifold; Printed Operating Manual

### Manufactured by:

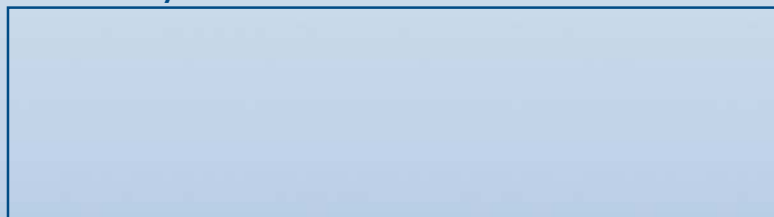


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### Distributed by:



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