

# Handheld

## PARTICLE COUNTERS



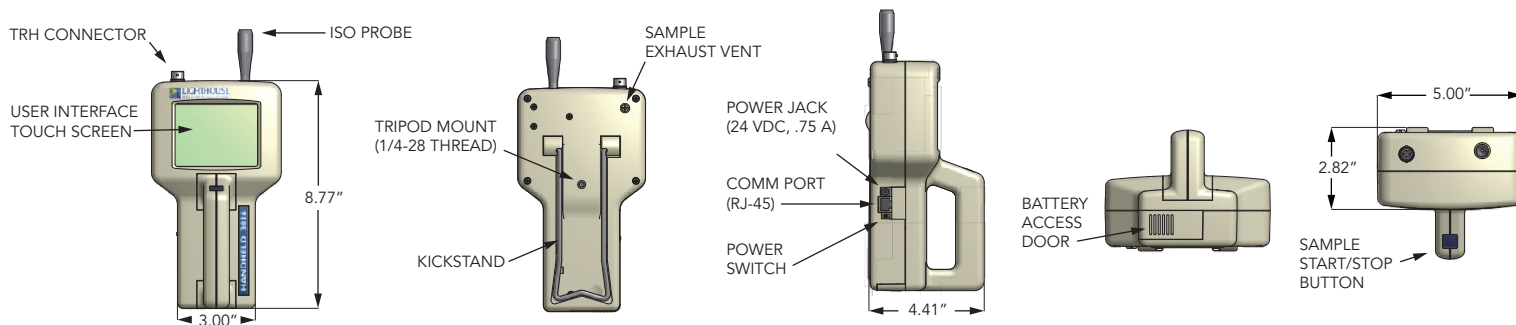
**T**HE ergonomically designed and lightweight Lighthouse Handheld particle counters feature 0.2, 0.3 and 0.5  $\mu\text{m}$  sensitivities and are the most advanced handheld particle counters on the market.

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. The Handheld can hold up to 3,000 records of particle data and store up to 50 recipes for sampling and reports. Removable batteries and an optional charger maximize uptime.

Data is easily downloaded using the LMS Express software. The Handheld can be used as a mobile particle monitor or become part of a larger facility monitoring and management system.

### FEATURES

- 0.2 - 25.0  $\mu\text{m}$  sensitivity
- 0.1 CFM flow rate
- Up to 6 channels of simultaneous count data
- 21 CFR Part 11 compliant secure USB flash transfer
- Extreme life laser diode technology >20-year MTTF
- 3.5 inch color touch screen display
- High impact injection molded plastic
- RS-232 via RJ45 to PC or optional printer
- 3,000 record data storage
- Reports: FS-209E, ISO-14644-1 & EU GMP Annex 1
- 2 year warranty



## TECHNICAL DATASHEET

### Handheld Particle Counters

Models	2016	3016	3016 IAQ (mass concentration)	5016
<b>Size Range</b>	0.2- 2.0 $\mu\text{m}$	0.3 - 25.0 $\mu\text{m}$	0.3 - 10.0 $\mu\text{m}$	0.5- 25.0 $\mu\text{m}$
<b>Standard 6 channels</b>	0.2, 0.3, 0.5, 0.7, 1.0, 2.0 $\mu\text{m}$	0.3, 0.5, 0.7, 1.0, 2.0, 5.0 $\mu\text{m}$ 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 $\mu\text{m}$ 0.3, 0.5, 0.7, 1.0, 2.5, 5.0 $\mu\text{m}$ 0.3, 0.5, 1.0, 2.5, 5.0, 10.0 $\mu\text{m}$	0.3, 0.5, 1.0, 2.5, 5.0, 10.0 $\mu\text{m}$	0.5, 0.7, 1.0, 3.0, 5.0, 10.0 $\mu\text{m}$
<b>Optional 6 channels</b>		0.3, 0.5, 1.0, 5.0, 10.0, 25.0 $\mu\text{m}$		0.5, 1.0, 3.0, 5.0, 10.0, 25.0 $\mu\text{m}$
<b>Counting Efficiency</b>	50%@0.2 $\mu\text{m}$ ;100% for particles >0.3 $\mu\text{m}$ (per ISO 21501-4)	50%@0.3 $\mu\text{m}$ ;100% for particles > 0.45 $\mu\text{m}$ (per ISO 21501-4)	50%@0.3 $\mu\text{m}$ ;100% for particles > 0.45 $\mu\text{m}$ (per ISO 21501-4)	50%@0.5 $\mu\text{m}$ ;100% for particles > 0.75 $\mu\text{m}$ (per ISO 21501-4)

#### Features

<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 ISO 21501-4)
<b>Concentration Limits</b>	8,000,000 particles /ft <sup>3</sup> @ 10% coincidence loss
<b>Calibration</b>	Meets ISO 21501-4 calibration using NIST traceable PSL spheres
<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 PC or optional printer
<b>Supporting Software</b>	LMS Express, LMS Express RT, LMS Pharma, LMS Pro
<b>Environmental Sensors</b>	Direct Mount Temperature/Relative Humidity probe: 0-150°F (-17.8 to 65.6°C)±1.8°F@77°F, 0-100% ± 5%@33%
<b>Touch Screen Display</b>	3.5 inch (8.89 cm), color TFT display
<b>Reports</b>	FS-209E, ISO-14644-1 (1999, 2015) & EU GMP (Model 3016-IAQ no report standards)
<b>Alarms</b>	Internal, adjustable alarm on counts, low battery, sensor failure
<b>Sample Inlet</b>	Isokinetic sampling probe
<b>Sample Output</b>	Internally filtered to HEPA standards (>99.97% @ 0.3 $\mu\text{m}$ )
<b>Vacuum Source</b>	Internal pump, automatic flow control
<b>Enclosure</b>	High impact injection molded plastic
<b>Power</b>	External power supply: 12 VDC, 1.25 A
<b>Battery</b>	Li-Ion, removable and rechargeable
<b>Dimensions</b>	8.75" (l) x 5.0" (w) x 2.5" (h), (22.23 x 12.70 x 6.35 cm)
<b>Weight</b>	2.2 lbs (1 kg)
<b>Languages</b>	English (U.S.), Deutsch, Espanol, Italiano, Francois, Russian, Japanese, Korean and Chinese

#### Included

Operating manual on CD; removable battery, direct mount isokinetic sample probe; purge filter; temperature/relative humidity probe; power supply; power chord; LMS Express software

#### Optional

Carry Case, Isokinetic sample probe with 6ft tubing, additional Li-Ion batteries, external battery charger w/AC & car adapter, thermal printer and printer cable, printed operating manual

#### Distributed By:



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[www.golighthouse.com](http://www.golighthouse.com) 1-800 945 5905 (Tollfree)  
[info@golighthouse.com](mailto:info@golighthouse.com) 1-541 770 5905 (Outside of USA)

