Laser Particle Size Analyzer LD-LLPA-C11

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Overview

Laser Particle Size Analyzer LLPA-C11 is an automatic, benchtop unit with compact design, performs both wet and dry dispersion measurements. Based on Mie and Fourier (Fourier and inverse Fourier) optical system, scattering theory with â€˜Laser Light diffraction technologyâ€™. It offers 0.02 to 2600 Î¼m (Wet dispersion mode) and 0.1 to 2600 Î¼m (Dry dispersion mode) measurement range. Analysis is made easy by incorporating highly advanced automatic SOP (standard operating procedure), to deliver reliable measurement performance, fast and accurate results.

Features:

- Measurement mode: Wet and Dry Dispersion
- Laser light diffraction (scattering) principle
- Fourier and inverse Fourier optical system, Mie theory
- Flexibility to switch between wet and dry dispersion units
- Automatic circulation and dispersion system
- Venturi dispenser with compressed air for dry sample dispersion
- Automatic alignment for accurate optical system
- Calibration accuracy to maintain data integrity
- Easy conversion between wet and dry mode â‰¤ 2 min
- Yields good repeatability and better reproducibility
- Class 1 laser product
- 21 CFR Part 11 complied software

Applications:

Used in wet and dry particle size analysis across pharmaceutical, soil and cement, food environment, life science and other industries.

Specifications:

Size	<table class="table table-striped"><tbody><tr>Measuring range
Optics	<table class="table table-striped"><tbody><tr>Red light source
Weight	23 kg
Accuracy	? 0.5 % (wet), ? 1 % (dry)
Detector	<table class="table table-striped"><tbody><tr>Arrangement

Quantity	92 pieces (forward, lateral, backward)
Software	<table class="table table-striped"><tbody><tr>Report
Auto test	Enable
Interface	USB 2.0 interface
Air filter	3 µm, 0.3 µm, 0.01 µm
Technology	Laser light diffraction
Data export	Excel, Pdf, Word, Jpg and etc.
Lens design	F-theta lens
Power supply	AC 220 V, 50 Hz
Air flow rate	0 to 6000 ml/ min
Repeatability	? 0.5 % (wet), ? 1 % (dry)
Testing speed	3 kHz
Air compressor	Gas container ? 60 L, pressure ? 5 bar
Vacuum cleaner	Wet dust collector or bag filter
Water capacity	600 ml
Analysis theory	Mie and Fourier scattering theory
Lens arrangement	Dual lens on the right and left side of sample cell
Operating system	Windows XP, Windows 7, 8 or 10
Resolution ratio	Single peak, Double peak, Multi-peak
Dispersion system	Ultra sound 50 W, 38 kHz dry-burn protection system
Water circulation	Centrifugal pump 3000 to 8000 ml/ min, auto water intake and rinsing
Dimension (L×W×H)	705 × 318 × 295 mm
Light path adjustment	Intelligent automatic alignment
Effective focal length	223 mm
Number of size classes	More than 100 customized grades

Hardware specifications	Intel core I5, 4 GB RAM, 250 GB HD
Sample dispersion system	<table class="table table-striped"><tbody><tr>Dispersion type
Typical measurement time	? 10 s
Particle size distribution	Suspension, Emulsion, Dry powders