PARTICLE SIZE AND SHAPE ANALYZERS

990

The inventor of
Laser Particle Size
Technology

PARTICLE SIZE ANALYZER CILAS 990

- Rugged, alignment-free design
- Software controlled switching between liquid and dry dispersion modes
- High performance dry dispersion system
- Simultaneous size and shape measurements (with *SHAPE ANALYZER* option)

YOUR PARTNER IN PARTICLE ANALYSIS

www.cilas.com
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MEASUREMENT RANGE

TECHNICAL SPECIFICATIONS

Laser source	Longlife fiber and collimated laser
Wavelength	830 nm
Power (lasers)	2 mW
Peristaltic pump	variable 30 - 240 rpm
Mechanical Stirrer	adjustable from 180 rpm up to 500 rpm
Ultrasonic transducer	continuous or pulsed frequency 38 kHz adjustable power 20, 25, 50 W
Input	115 V/60 Hz - 230 V/50 Hz consumption < 230 VA
Laser Safety Classification	21 CFR-1040 / NF EN 60825-1/A2
Closed Cover	Class I of NF EN 60825-1/A2
Open Cover	Class III of NF EN 60825-1/A2
Compliance	ISO 13320, 21 CFR-Part 11, CE, USP 429
EMC	NF EN 61326-1 directive 2004-108 / CEE
Safety	NF EN 61010-1 directive 72.23 / CEE

Measurement	Laser diffraction - based on Mie and Fraunhofer scattering theories
Size range	
liquid mode	0.2-500 µm
dry mode	0.3-500 µm
Dispersion type	venturi
Repeatability	< 1%
Accuracy	< 3%

Acquisition time	
liquid mode	60 seconds
dry mode	30 seconds

External dimensions	
Length/width/height	890, 530, 430 mm 35, 21, 17 in
Weight L/D/LD	55-48-61 kg / 121-106-135 lbs

SHAPE ANALYSIS

- The *SHAPE ANALYSIS* package includes a CCD camera to view particle shape. Particles are analyzed in a flow through cell connected to the laser particle size analyzer. The system is fully automated through software and allows to measure 60 size and shape parameters.
- The *SHAPE ANALYSIS* system includes an easy to use software package for shape characterization.
- Range:from 0.5 µm to 2500 µm.

ALCOHOL RECIRCULATOR

- The alcohol recirculator is used to regenerate alcohol when analyzing water soluble samples.
- The unit is fully automated using our *SIZE EXPERT* software.

PRODUCTS AVAILABLE IN

- Liquid mode = 990 L
- Dry mode = 990 D
- Liquid and dry mode = 990 LD

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