

PARTICLE SIZE AND SHAPE ANALYZERS

1090

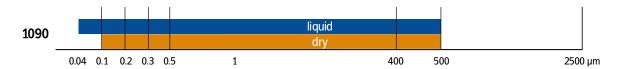
The inventor of Laser Particle Size Technology

# **PARTICLE SIZE ANALYZER CILAS 1090**



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

# **MEASUREMENT RANGE**



#### TECHNICAL SPECIFICATIONS

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Laser source	Longlife fiber and collimated laser
Wavelength	635 and 830 nm
Power (lasers)	2 and 5 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	0.04-500 μm
dry mode	0.1-500 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

PRODUCTS AVAILABLE IN

· Liquid and dry mode = 1090 LD

• Liquid mode = 1090 L

• Dry mode = 1090 D

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.



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