

## General

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Parameters measured	2 (Size, transmittance)
Temperature control	
Temperature range	0 °C - 90 °C
Standard accuracy	± 0.3 °C
Improved accuracy (optional)	± 0.2 °C at 0 °C, ± 0.1 °C at 25 °C, ± 0.3 °C at 90 °C
Ambient temperature range	10 °C – 35 °C
Humidity	35 % – 80 % non-condensing
Condensation control	Purge using dry air
Semiconductor laser	40 mW, 658 nm <sup>1</sup>
Laser warm-up time	6 min
Correlator	10 ns to 85 s, max. 248 channels
Dimensions D x W x H (weight)	460 mm x 485 mm x 135 mm (16 kg)

1. Specified wavelength range 655–661 nm

## Size

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Range	0.3 nm – 10 µm <sup>1</sup> (diameter)
Min. sample volume	12 µL
Min. concentration (protein)	0.1 mg/mL (lysozyme)
Max. concentration	50 % w/v (sample-dependent)
Accuracy	Better than ± 2 % on NIST traceable standards
Repeatability	Better than ± 2 % on NIST traceable standards
Measurement angle	175°
Measurement duration	Automatic or manual
Filter optical density	Automatic or manual
Focus position	Automatic or manual
Analysis algorithm	NNLS using Tikhonov regularization, CONTIN

1. under laboratory conditions

## Transmittance

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Measuring time	10 s
Min. sample volume	15 µL
Accuracy	Better than ± 1 %

## Software

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One-page presentation	Input parameters, live signals and results on a single page
21 CFR part 11 software	Audit trail, customizable user management, electronic or hard copy signing
Analysis tab	Comparison of measurements from different experiments on single graph
Reporting	Template or customizable
Series measurements	Time, temperature, concentration, focus, transmittance

## Patents & Quality Standards

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Patent [AT516382](#) (sample temperature control)  
 ISO 22412:2017, ASTM E2490-09, USP 729