

## spray particle size analyzer for pharmaceutical industry

Spray laser particle size analyzer incorporates nanotechnology, supports intelligent and modular design, can be adapted to a variety of atomizers, specifically for detecting small spray equipment droplet size.

### Spray Laser Particle Size Analyzer

The Spray Laser Particle Size Analyzer is equipped with a high-speed data acquisition system, which can quickly and accurately analyze the droplet size distribution. The software of the Spray Laser Particle Size Analyzer also integrates the GMP management function commonly used in the pharmaceutical industry, which is convenient for the standardized management of data. Spray particle size analyzer can be realized on the air droplets, droplets, smoke and powder mist particles such as non-contact measurement, in line with the National Pharmacopoeia for inhalation aerosols, sprays, powder mist testing standards.



### Main Features

1. Intelligent modular structure, compact size, open test area for flexible operation.
2. Motorized test bench with position memory and automatic homing function, which can significantly reduce human error and realize one-key test.

3. Lens protection system combined with adjustable negative pressure drainage device, effectively preventing fog droplet contamination of the lens, adapting to the testing needs of different nebulizers.
4. The use of single-beam parallel optical path, dual-lens and dual-array detector, can be high-density collection of scattered light from different angles, improve the detection accuracy and measurement range.
5. High-speed data acquisition, fast analysis speed, suitable for high-efficiency testing of large-volume samples.
6. The software supports GMP data management, easy to comply with the use of the pharmaceutical industry.

### **Working Principle**

Spray Laser Particle Size Analyzer uses the physical principles of laser scattering and diffraction for particle size measurement. When the laser beam is irradiated to the spray particles, the different sizes of droplets will produce different intensity of scattered light at different angles. The detector array collects these scattered signals, and through the analysis of the scattered spectra, combined with a mathematical model, the particle size distribution of the droplets is deduced. The laser particle sizer is a non-contact measurement method, which can accurately detect the droplet size in real time and dynamically.

<b>Model</b>	<b>LP100</b>
Implementation standards	GB/T19077:2016, ISO13320:2020, Q/0100JWN001-2024
Measurement Range	0.1um to 100um
Channel number	80
Accuracy error	≤ 1%
Repeatability error	≤ 1%
Laser light source	Semiconductor laser with a wavelength of 650 nm and power greater than 1 mW
Sample introduction method	open type
Measurement zone length	60mm
Dimensions	720mmx620mmx370mm
Weight	30kg
Power Supply	100Vac, 230Vac, 50Hz, 60Hz