

minilDV/65-3D

Multi-Dimensional Miniaturized Velocimetry Reliable. Portable. Precise.

Data collection made simple. Ideal for industrial and research applications, the miniLDV G5-3D combines multiple sensors in a simple setup to measure flow velocity in three dimensions.

Proprietary technology enables miniaturized and rugged sensors at a fraction of traditional LDV size. A wide range of customizations will meet any experimental demands. With the pre-calibrated sensors and a simple alignment process, results can be acquired quickly even with no previous experience. Just connect to a computer, orient around the target, and it's ready to perform.

For fluids research, surface speed measurements, wind tunnel analysis, and more, the miniLDV G5-3D is the versatile sensor solution for 3D flows.



The miniLDV G5-3D expands the G5 series capabilities into dynamic 3D flows, measuring three perpendicular components of velocity. The included Burst Processor software collects data, moves the probes on optional traverses, and presents flow statistics. Traverses fully automate the measurement of flow profiles, making PIV-style full-field characterization simple. Sensors can be customized for use underwater, at high temperatures and pressures, and high vibration applications.



Advantages of the G5-3D

- No alignment or calibration required
- No water cooling required
- Compact and light-weight
- NIST traceable calibration offered

- Reduction lens option: screw-on lens to reduce standoff by up to 40%
- Frequency shifting feature measures flow direction along with speed

Specifications

Traversing Stage Options

for profile measurements

Measurement Specifications	
Velocity Range	-50 to 600+ m/sec*
Repeatability	99.9%
Accuracy	99.7%
Measurement Volume	
Dimensions	Min: 30 x 60 x 200 μm*
Standoff Distance	35mm to 750mm available
Laser Specifications	
Laser Power	140 mW [x3]
Wavelength	658, 785, 830 nm
Laser Type	Class IIIb
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Operating Parameters	
Temperature	5 to 40°C
Pressure	Atmospheric
Software OS	Windows 10 & 11
Port	USB-A

Configuration Options

- 1D sensors, x3 [pictured]
- 2D sensor + 1D sensor

Optional Features

- Water Proof Housing
- High Pressure and High Temp. Housing
- Battery Powered

1D, 2D, & 3D traverse systems available

^{*}Values are a function of the fringe separation and standoff distance