



miniLDV G5-2D

Multi-Dimensional Miniaturized Velocimetry
Reliable. Portable. Precise.

Data collection made simple. Ideal for industrial and research applications with two-dimensional velocity flows, the miniLDV G5-2D is a pencil length sensor that sets up in under 30 minutes.

Proprietary technology enables a miniaturized and rugged sensor at a fraction of the traditional LDV size. A wide range of customizations will meet any experimental demands. Permanently aligned and calibrated, results can be acquired quickly, even with no previous experience. Just plug it into a computer, point it at the target, and it's ready to perform.

For fluids research, surface speed measurements, wind tunnel analysis, and more, the miniLDV G5-2D is the versatile sensor solution for 2D flows.



The miniLDV G5-2D measures two perpendicular components of velocity, expanding the G5 series capabilities into planar flows. The included Burst Processor software can collect data, move the probe on optional electronic traverses, and present flow statistics. With a traverse, measuring a flow profile is fully automated, making PIV-style full-field characterization simple. Sensors can be customized for use underwater, at high temperatures and pressures, and in high vibration applications.



Advantages of the G5-2D

- Measures two components of velocity
- Compact and lightweight
- No alignment or calibration required
- NIST traceable calibration offered
- Velocity Range from low to supersonic
- Frequency shifting feature measures flow direction along with speed

Specifications



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	50 to 300 mm available
System Specifications	
Total Weight	2 lb. (1 kg)
Sensor Dimensions	2" x 3" x 6" (51 x 76 x 150 mm)
Sensor Length	17.5" (444 mm)
Processing Engine	8.2" x 6.8" x 2.4" (208 x 172 x 60 mm)
Cable Length	10' (3.05 m)
Power Supply	12 VDC, 0.3 Amp

Laser Specifications	
Laser Power	130 mW (x2)
Wavelength	658 and 830 nm
Laser Type	Class IIIb
Operating Parameters	
Temperature	5 to 40°C
Pressure	Atmospheric
Software OS	Windows 10 & 11
Port	USB-A
Traversing Stage Options	
<ul style="list-style-type: none"> • 1D, 2D, & 3D traverse systems available for profile measurements 	
Optional Features	
<ul style="list-style-type: none"> • Water Proof Housing • High Pressure and High Temp. Housing • Battery Powered 	

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