
# miniLDV G5L

## Rugged Minaturized Velocimetry

Reliable. Portable. Precise.

Data collection made simple. Ideal for industrial and research applications, the G5L has an expansion lens for longer standoff distances of up to 750mm and sets up in under 30 minutes.

Proprietary technology enables a portable 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 G5L is the versatile sensor solution for long-standoff needs.

**measurementsci.com** **626.577.0566**

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The miniLDV G5L expands the G5 series' versatility with up to 750mm standoff length, and optional reduction lenses can flexibly reduce the standoff by up to 40%. The included Burst Processor software collects data, presents flow statistics, and moves the probe on optional electronic traverses. 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 miniLDV G5L

- **No alignment or calibration required for the life of the sensor**
- **Portable and lightweight**
- **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

**WARNING** Laser Radiation | Avoid Exposure To Beam | Class 3B (IIIb) Laser Product

| Measurement Specifications | |
|---|---|
| Velocity Range | -10 to 600+ m/sec* |
| Repeatability | 99.9% |
| Accuracy | 99.7% |
| **Measurement Volume** | |
| Dimensions | Min: 30 x 60 x 200 µm* |
| Standoff Distance | 400mm to 750mm available |
| **System Specifications** | |
| Total Weight | 2.8 kg |
| Sensor Diameter | 3" (76 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 |

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

| Laser Specifications | |
|---|---|
| Laser Power | 140 mW |
| Wavelength | 658 nm, 405nm option |
| Laser Type | Class IIIb |
| **Operating Parameters** | |
| Temperature | 5 to 35°C |
| Pressure | Atmospheric |
| Software OS | Windows 10 & 11 |
| Port | USB-A |

**Traversing Stage Options**

- 1D, 2D, & 3D traverse systems available for profile measurements

**Optional Features**

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