

2D miniLDV G5L

Integrated 2D LDV with extended standoff

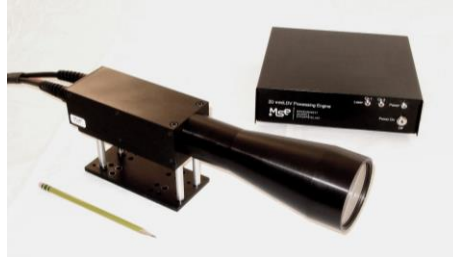
The G5L series offers an extended working distance. The 2D miniLDV incorporates two 1D probes with frequency shifting into a single unit with permanently co-located probe volumes. It is ideal for research and commercial applications. Setting up takes less than one hour because MSE's miniLDV probes require no alignment or calibration by the user.

ADVANTAGES OF THE 2D MINI LDV:

- Self-contained
- Factory sealed
- Co-located probe volumes
- No alignment needed
- Calibration done at the factory
- Frequency shifting on both components
- No water cooling required
- Accurate measurement of fluids of varying temperature, pressure, and density
- Computer controlled 1, 2, and 3-axis traversing system
- 2D and 3D automated profile measurement
- Battery operated option
- Waterproof and temperature resistant housing option

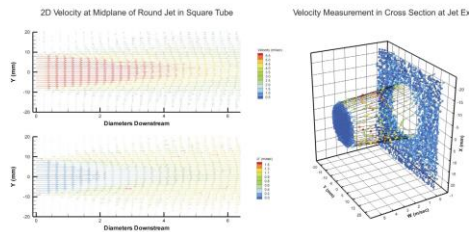
APPLICATIONS INCLUDE:

- Fluid mechanics, aerodynamics, turbulence, oceanography, and atmosphere studies
- Wind, water, oil tunnels and channels

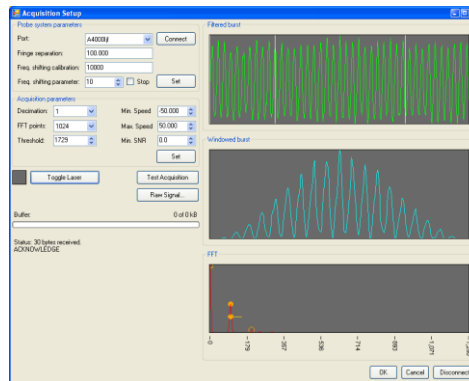


The 2D miniLDV System with 500 mm standoff is extremely compact, self contained, and permanently aligned; no calibration or alignment by the user is required. The probe contains two high power diode lasers, miniature beam shaping optics, and receiving and detection optics.

2D Flow Mapping with miniLDV™



The 2D miniLDV System includes the 2D miniLDV probe, dual Processing Engines, and a multi-dimensional version of MSE's Burst Processor Acquisition Manager software. With the optional computerized traverses, setting up a flow-mapping experiment for unattended acquisition is a matter of minutes, not hours.



The interface of the acquisition software complements the probe's ease of use.

| MEASUREMENT SPECIFICATIONS | |
|----------------------------|-------------------|
| Velocity range | -50 to 600 m/sec* |
| Repeatability | 99.9% |
| Accuracy | 99.7% or better |

| PROBE VOLUME | |
|------------------------------|-----------------------------------|
| PV dimensions (x by y by z) | Typical: 150 x 300 x 1200 μm** |
| Available standoff distances | 400 mm, 500 mm, 600 mm and 750 mm |

| PROBE SPECIFICATIONS | |
|----------------------|---|
| Probe weight | 6 lbs (3kg) |
| Dimensions | 51 x 76 x 444 mm 2 x 3 x 17.5 inches |

| LASER SPECIFICATIONS | |
|----------------------|----------------|
| Laser power | 2 x 140 mW |
| Wavelengths | 658 and 785 nm |
| Laser type | Class IIIb |

| OPERATING PARAMETERS | |
|----------------------|-----------------|
| Temperature | 5 to 40°C*** |
| Pressure | Atmospheric *** |
| PC requirements | Laptop or PC |

| OPTIONAL FEATURES | |
|--|--|
| Water proof, high pressure, and high temperature housing | |
| Traversing stage for profile measurements | |
| 1-D, 2-D, and 3-D traversing systems | |

| POWER SUPPLY | |
|------------------|--|
| 12 VDC Universal | |

* Velocity range is a function of the fringe separation and the dynamic range. Please specify your required velocity range.

** Probe volume dimension is a function of the standoff distance

***Higher operating temperature and pressure options available

One or more of the following U.S. Patents apply: No. 6,654,102, 6,580,503, 6,608,668, 6,717,172, 6,956,230

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