



1D Laser System

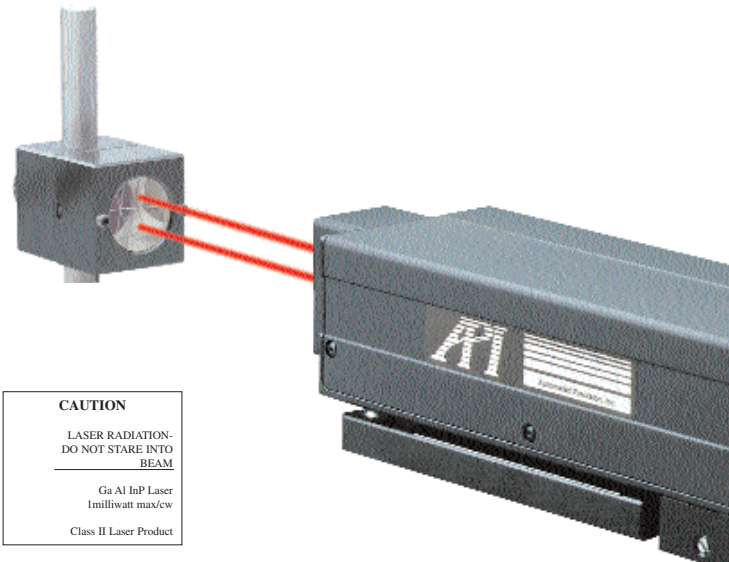
The API 1D Laser is the basic He Ne laser and interferometer used in the API 5D and 6D laser measurement systems. The laser is designed as a compact unit with careful consideration given to system stability allowing the interferometer to be mounted on the laser for normal machine measurements. System includes an adjustable fixture for easy alignment to machine axis.

Applications:

- Machine linear axis positional accuracy
- Diagonals for volumetric analysis
- Establishing correction values for CNC machine scale compensation
- Certifying CNC and CMM positioning capability

System Features:

- Laser includes hardware and software to correct for atmospheric conditions that differ from standard conditions
- Compact system fits in case suitable for carry on luggage
- Adjustable turning mirror
- Very compact system that is mounted directly to the machine table. Use of the turning mirror or a small extension bar (less than 10 inch) will typically allow measurement of entire table area
- Electronic control interfaces to computers through RS-232 serial port
- May be upgraded to 5D or 6D system



Specifications:

	Regular	Precision
Linear Accuracy	0.5ppm	0.2ppm
Linear Range:	40 meters 130 feet	40 meters 130 feet
Resolution:	0.02 micron 0.000001 in.	0.02 micron 0.000001 in.

Software Features:

- Data displayed in real-time as it is being saved to data file for analysis
- Data analysis according to ANSI, NMTBA, ISO, VDI
- WIN95/98/2000/NT software
- Automated CNC Control Compensation software available as an option