

LASERULER[®]

Features

■ Frame

Rugged cast iron legs provide mechanical stability ensuring measurement repeatability and reproducibility.

■ Granite Surface Plate (optional)

Provides required stability to minimize influences on the integrity of the measurement system.

■ Vibration Isolation Stand (optional)

Specially designed active air isolation system works together with granite surface plate to provide a maximum of vibration control.

■ Keyboard & LED Display

Clearly marked keys and a bright LED display makes instrument operation a breeze.

■ Motorized Probe

Touch activated two-speed measurement control eliminates operator influence.

■ Digital Laser Interferometer

Wavelength of laser light used as basis for measuring. Operating principle insures maximum resolution, traceability and performance.

■ Two-Step Calibration

This advanced feature allows the LASERULER to be calibrated with two lab grade NIST traceable gage blocks. This two-step process takes only 30 seconds from start to finish.

■ Automatic Cycling

Programmable inspection cycle permits predetermined constant throughput rate. Operator need only position the part for automatic measurement, allow the probe to engage the specimen, and then remove. This simple procedure is repeated until the lot is complete.

■ Direct Reading or Comparator

Depending on your accuracy requirements, the instrument can easily be operated in either mode.

■ Go/No-Go Presets

Automatic go/no-go decisions from operator-entered tolerance limits and actual measured values.

■ Statistical Measurement

Summation of all measurements is stored on command. Stats display indicates computed mean value and one standard deviation.

■ Printer (optional)

Convenient hard copy for automatic test record.



LASERULER®

SPECIFICATIONS

Instrument Uncertainty: ^{1, 2}	5 + .5L Microinches (±2 std. dev.)	.125 + .5L Microns (±2 std. dev.)
Repeatability: ¹	1.6 Microinches (±2 std. dev.)	.04 Microns (±2 std. dev.)
Display Resolution:	0.1 Microinch	0.0025 Microns
Measurement Range:	0-8.0 inches	203 mm
Maximum Specimen Size (Cylindrical Shape):	15 inches x 8.3 inches high	381 x 210 mm
Measurement Probe Contact Force, Standard:	0.5 oz*	14 grams*
Measuring Probe Geometry:	Tungsten Carbide Flat (1/10 wave) Diamond Tip (standard 0.125"/3mm radius) Mounts with ADG #4-48 adapter	
LED Data Display:	16 Digit, Alpha-Numeric	
Electrical Requirements:	110/120 VAC 60 Hz (2 AMP) or 220/240 VAC 50 Hz (1 AMP)	
Printer Interface:	Centronics Compatible	
Serial Port:	RS-232C Compatible. Sends and receives ASCII characters.	
Dimensions (W x D x H):	20 x 16 x 26 inches	51 x 41 x 66 cm
Shipping Weight:	150 lbs.	68 kgs.
Laser Type:	Helium-Neon 632.8 nm (RED)	

1. Environmental conditions should be within +/- 0.5°F (0.25°C), +/- 0.05 in Hg (1.5mm Hg), and +/- 25% relative humidity between mastering and measuring. Simply re-master if variation exceeds these conditions. Re-mastering takes less than 1-minute.
2. Total measurement uncertainty will vary with grade of master and application.

L = length

NIST TRACEABLE!

LASERULER'S exclusive Digital Interferometer-based sensor accurately measures length by comparing the measurement probe position to the absolute wavelength of the laser light source.

*Contact factory for specific requirements

OPTIONAL ACCESSORIES (LABMASTER & LASERULER)

U302593	.750" Lapped Cylinder	U305759	Isolation Stand
U302594	V-blocks (set of 3)	U305754	Remote Footswitch Control
305849	Probe Tip Adapter	**U305761	Thermal Printer (110-120 volt)
305901	Breath Shield	**U305930	Thermal Printer (220-240 volt)
* 306000	Serrated Stainless Steel Anvil	**D10065-007	Printer Paper
* 306023	Small Part Anvil	**U305755	Specimen Anvil
*U306053	.030" Backstop for Small Parts Anvil	**U305756	Saddle Anvil
*U306052	.125" Backstop for Small Parts Anvil	** 305762	Carbide Anvil
* 305997	Serrated Tungsten Carbide Anvil	D10544-014	3-piece Master Gage Block Set
* 306024	Serrated Large Parts Anvil	D10555-004	12 Assorted Probe Tips
*U306027	Stainless Steel Saddle Anvil	D10555-003	Diamond Probe Tip
U305843	Tower Thermometer	U305758	Variable Force Kit
D10017-005	Line Regulator	U305753	Monochromatic Light (110-120volt)
U305917	24" x 24" Surface Plate	U305939	Monochromatic Light (220-240volt)
D10559-104	Stand with Castors	U305752	Optical Leveling Gage
D10559-016	Isolation Stand	*D10555-019	Corner Cube Probe Tip
U305763	24" x 36" Surface Plate	*U306114	Serrated Bump Anvil
U305970	Stand with Castors	*U306487	5-Point Positioner
		*U306274	Corner Cube Anvil

*Available for LABMASTER only.

**Available for LASERULER only.

Note: Be sure and ask for an item not listed. We are always developing new accessories.

WARRANTY POLICY

Any part which, under normal operating conditions in the plant of the original purchaser, proves defective in material or workmanship within one (1) year from the date of shipment as determined by **Pratt & Whitney's** inspection, will be repaired free of charge, f.o.b. factory Bloomfield, Connecticut, provided that the product has been properly installed, maintained and operated within the limits of rated and normal usage.



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