

Lasercheck[®] PORTABLE BATTERY POWERED SURFACE ROUGHNESS MEASUREMENT GAGE

Optical Dimensions introduces the newest version of the patented Lasercheck[®] series of high speed, non-contact surface roughness measurement gages providing the most simple, fast, economical, and reliable measurements available.



No Maintenance or Calibration Costs

Lasercheck utilizes non-contact laser measurement technology and is the most rugged surface roughness gage ever produced. The measurement head has NO FRAGILE MOVING PARTS that wear out like those used in traditional contact measurement gages. The solid state electronics and laser are mounted in a sturdy aluminum block housing and can withstand drops on a concrete floor from a tabletop and still provide reliable measurements. You can rely on years of trouble free shop floor operation and eliminate maintenance costs with Lasercheck.

Data Management

Optional software and cabling is available allowing transfer of saved measurements to a PC in ASCII text file format to be saved to any location on your computer network. The data is then available for import into commercial SPC and spreadsheet software packages.

Automated Lasercheck Systems

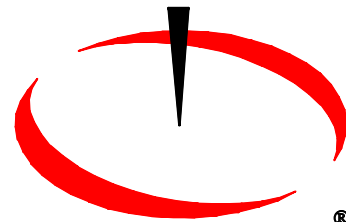
Lasercheck is available with electronics and software for fully automated surface finish testing. Full I/O is incorporated for triggering and monitoring measurements. Automated Microsoft Windows PC data control and collection software provide high speed 100% on-line roughness measurements. OEM versions for integration into automated machine tools and gaging systems are also available. Contact Optical Dimensions for details.

Superior Performance at Lower Cost

Lasercheck is easier to use and faster than any competitive surface measurement gage. Now this non-contact measurement technology is available at the cost of a less repeatable stylus contact measurement gage and at a fraction of the cost of any non-contact measurement gage. Superior durability and no moving parts make the Lasercheck head virtually indestructible. High maintenance and re-calibration costs are eliminated making Lasercheck the most economical surface finish measurement instrument available.

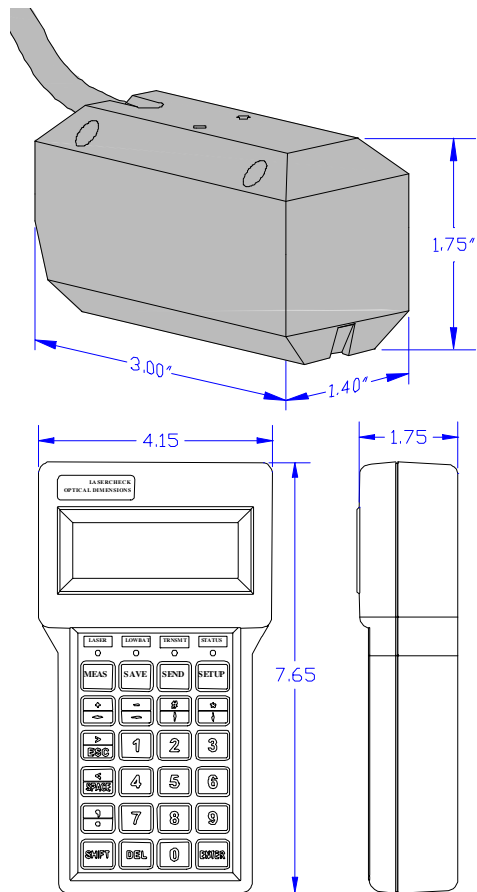
Ease of Use

The portable battery powered controller and measurement head combined weigh a mere 2 pounds. The simple to handle head is just a compact 3.0 X 1.4 X 1.75 inches. The head easily positions on flat, cylindrical (any diameter) or large diameter bore surfaces. Then push the "MEAS" button on the controller. The easy to read roughness value is instantly displayed on the LCD screen. The measurement can be saved in the controller by pushing the "SAVE" button.



Performance Specifications

Measurement / Detection Method	Laser reflectance and scattering
Measurement speed	Single measurement in < 0.5 seconds
Measurement range	0.50 μinch to 80 μinch / 0.012 μm to 2.0 μm
Accuracy:	
0.25 μinch to 10 μinch	± 0.25 μinch
10 μinch to 80 μinch	± 2.5% of measured value
Repeatability	± 1.0% of measured value
Spot size (area-measured)	5 mm X 1 mm
Environmental considerations (temperature / humidity):	
Operating	-10° C to +55° C / 10% to 90% RH
Storage	-40° C to +80° C / 1% to 99% RH
Power requirements	6 (Six) AA Batteries



Other Features

- Works on any material/color (rubber, glass, steel, etc.)
- Rugged sealed measurement head
- NEMA 12/13 level protection controller
- Display individual Ra Roughness Values
- Easy to read LCD display
- Save ASCII format text file for transfer to PC
- 256 Kbytes available for data storage
- Interchangeable Heads and Controllers

Options

- Alignment Legs for cylindrical parts
- Foam lined portable carrying and shipping case
- Software and cabling for PC interface
 - * Includes 110V wall power plug in

Storage Computer Requirements

- Windows 95, NT, or newer
- Available serial port

Automated and OEM Versions Available

- Automated control electronics and Microsoft Windows based PC software for end users
- Board level electronics and serial command interface for integration into Machine Tool or Automated Gaging System Electronics
- Contact Optical Dimensions for details

