

INTRODUCES**Lasercheck[®] HANDHELD SURFACE ROUGHNESS MEASUREMENT GAGE**

Optical Dimensions introduces the newest version of the patented Lasercheck[®] series of high speed, non-contact surface roughness measurement gages. The new compact handheld Lasercheck provides the fastest, easiest, and most reliable measurements available.

**Speed and Performance**

Now surface roughness measurements can be made instantly by setting the compact measurement head on the surface. Lasercheck measures and displays a precise and repeatable roughness reading in a fraction of one second. Lasercheck is designed for use on the shop floor, providing laboratory quality measurements during manufacturing of any surface or material.

Data Management

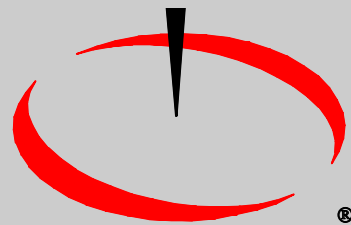
Lasercheck measurements can be saved in the control unit and output to a PC to be saved to any location on your computer network. Data formats include graphical Lasercheck file format and ASCII file format for direct input to commercial SPC and spreadsheet software packages.

**Reliability and Durability**

Lasercheck is the most rugged surface roughness gage ever produced. There are no moving parts to maintain and no fragile and expensive stylus tips to constantly replace. It withstands moisture and shop floor handling. No complicated adjustments or calibration procedures are ever required; just an occasional simple window cleaning - operators can perform the operation in seconds. You can rely on years of trouble free shop floor operation and no maintenance costs with Lasercheck.

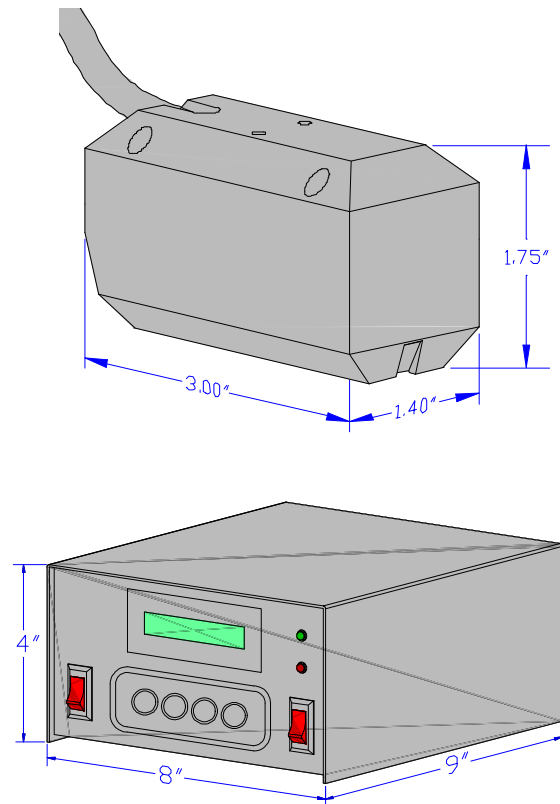
Ease of Use

The simple to handle head is just a compact 3.0 X 1.4 X 1.75 inches and weighs less than 1 pound. There are no complicated alignment procedures required. Simply position the measurement head on a surface and select start from the control unit pushbuttons or attached PC software. Easy to read roughness values are instantly displayed on the LCD screen or the optional attached PC screen.

OPTICAL DIMENSIONS[®] LLC

Performance Specifications

Measurement / Detection Method	Laser reflectance and scattering
Measurement speed	Single measurement to >30 measurements per second
Measurement range	0.25 μ inch to 80 μ inch / 0.006 μ m to 2.0 μ m
Accuracy:	
0.25 μ inch to 10 μ inch	\pm 0.25 μ inch
10 μ inch to 80 μ inch	\pm 2.5% of measured value
Repeatability	\pm 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	110 VAC, 50 / 60 HZ, 2.0 Amps max.



Other Features

- Works on any material/color (rubber, glass, steel, etc.)
- RS232 Interface port to upload and store data
- Stored and printed items:
 - * Roughness Plot
 - * Date and Time
 - * Average Ra Roughness and Standard Deviation
 - * Minimum / Maximum Ra Roughness
 - * ASCII Formatted File
 - * Individual Measurement Values

Options

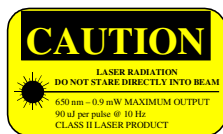
- Alignment Legs for cylindrical parts
- Input / Output (I/O) Options:
 - * 4-20 mA Current Loop, configurable threshold
 - * Failed Part Output, configurable threshold
 - * External Start / Stop for Automated Operation
 - * RS485 Interface port to operate multiple heads through one process computer

Storage Computer Requirements

- Windows 95, 98, 2000, or NT
- Available serial port

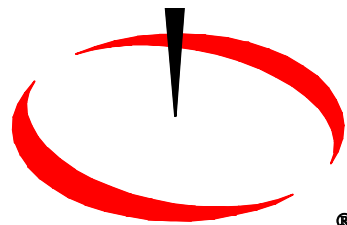
Optical Dimensions reserves the right to change specifications without notice.

U.S. Patent No. 5,608,527



SAFETY PRECAUTIONS

Lasercheck is a class II laser product emitting red visible (650-nm) laser radiation. The beam is not hazardous during normal operation. Avoid staring directly into the laser beam or at the direct reflection from a specular surface.



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