GelSight Mobile™ Series 2

High-resolution, non-destructive 3D surface analysis and defect inspection

The GelSight Mobile™ Series 2 is a handheld, precision surface analysis solution that immediately quantifies the X-Y-Z dimensions of any surface material at any workflow location, regardless of composition, reflectivity, transparency, or ambient lighting conditions. Its precise, repeatable, in-situ measurement capability can save thousands of dollars and/or man-hours per year in unnecessary scrap, re-work, down-time, or poor yields by eliminating false failures and boosting productivity.

Breakthrough Digital Touch technology is Industry 4.0 and Quality 4.0 ready

Automated process workflows, including robotic operation, are enabled by external triggering, remote mounting, pass/fail test routines, batch-mode analysis, stl /.csv outputs, and immediate .pdf report generation. Series 2 has proven particularly useful for measuring roughness of additive manufactured and for turning machined products.

Accurate
Provides extremely detailed, highly accurate and repeatable, micron-level measurements in three dimensions.

Portable
Ergonomic, handheld unit allows convenient, safe use on the shop floor, in the lab, or in the field.

Fast
Provides 3D visualization and measurements within seconds.

Versatile
Inspect and measure any material— metal, glass, 3D printed, composite, plastic, painted, fabric, organic and more — including reflective, transparent and translucent surfaces under any lighting conditions in any location.

The GelSight Series 2 Probe combined with our proprietary GSMobile Software offers the benefits of contact and non-contact surface measurement techniques, with the simplicity of a portable, handheld instrument that requires no fixturing.

## Improve productivity across a wide range of workflows

- Production Quality Inspection & Quality Control
- Field Installation and Acceptance
- MRO (Maintenance & Repair Operations), and Sustainment
- Research & Development
- Academia

Measurement and Analysis Applications

Unlike manual, mechanical, or optical measurement technologies, GelSight's patented elastomeric sensor technology conforms to the topology of any surface regardless of material, reflectivity, transparency, or ambient lighting conditions. 2D surface detail is displayed in real time, and micron-level 3D measurement and analysis of surface textures and defects are computed and displayed in seconds.

GS Mobile includes a powerful suite of 2D and 3D tools for surface characterization. Our BASE software package has a focus on the image itself typically for use in applications where a field portable SEM-like image is desired. GS Mobile CORE is for users looking to either export their 3D data or focused on scratch and offset measurement. Our fully featured GS Mobile PRO software offers many tools including the ability to measure profile and surface roughness, automatically detect and characterize defects, pitting, small radii and many more. For hard-to-reach areas, the updated Replica Transformation feature enables intuitive, direct and in-situ measurement of replica material to eliminate the traditional down-time waiting for lab results with GelSight's fast report creation options streamlining workflows.

Applications Include
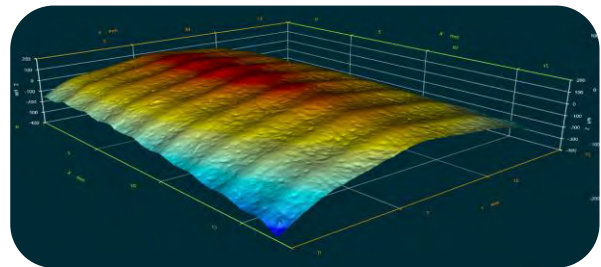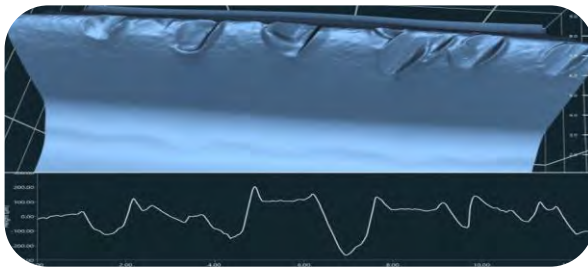
- Dents, Nicks, and Scratches
- Pitting and Corrosion
- Coating Profile
- Fastener Flushness
- Fillet Relief

- Roughness
- Porosity
- Shot Peen
- Texture / Finish
- Weld Bead

- Radius of Curvature
- Hole Diameter (X-Y)
- 3D Geometry / Topology (X-Y-Z)
- Cracks
- Direct Replica Measurement

Series 2 Condensed Specifications

Dimensions	5 cm x 5 cm x 15.5 cm	2" x 2" x 6.1"
Weight	400 g	0.88 lbs
Field of View	17.0 mm x 14.2 mm	0.66" x 0.56"
x-y Accuracy (G520 Calib. Plate)	3 μm + 0.2%	0.1 thou + 0.2%
x-y Accuracy (G500 Calib. Plate)	3 μm + 1%	0.1 thou + 1%
z Sensitivity	< 1 μm	0.04 thou
z Accuracy (1-50μm)	1 μm + 4%	0.03 thou + 4%
Roughness (Ra)	2-20 μm	79 –790 μin
Capture Speed	100 mS	
Operating System	Windows 10 and above	
Interface / Power	USB-C	
Data Export Format	PDF, STL, CSV, TMD, X3P	
Optional Computer	Microsoft Surface Pro, 12.3"	

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