

GELSiGHT Mobile™

GelSight Mobile™ is a handheld instrument that precisely visualizes and measures the 3D topography of any surface, revealing microscopic structures that are difficult to see under ordinary circumstances. The tool can be used on any surface, including metal or glass, due to GelSight's elastomeric sensor.



Aerospace Applications

OEM / Manufacturing:

Quality Control to measure and characterize surface features or defects to maintain tolerance

Maintenance Repair Overhaul:

Surface anomaly and discontinuity measurement before or after repairs

Example Measurements:

Scratches, impact dents/dings, pits, surface roughness, corrosion, texture, gaps, and offsets

Main Features



Rapid Results:

3D measurements and data file provided within seconds of capture



Handheld:

Ergonomic, easy-to-use for immediate data in the field or on factory floor



Precise:

Incredibly detailed and reliable micron-level 3D measurements



Versatile:

Measure any material (metal, glass, carbon fiber) or surface (reflective, transparent)

Why GelSight?

Advantages:

- High-accuracy quantitative 3D data for entire surface vs. depth gauge or 2D profilometer
- Easy, immediate, and repeatable results vs. laborious or time-consuming processes
- Can be conducted in situ without destruction or disassembly to send off-site
- Works with reflective and transparent surfaces, such as metal or glass

Economic Benefits:

- Reduces waste/scrap and non-quality costs
- Decreases capital need for inventory
- Improves throughput/productivity for high-cost parts
- Enhances documentation/audit trail of data for later reference

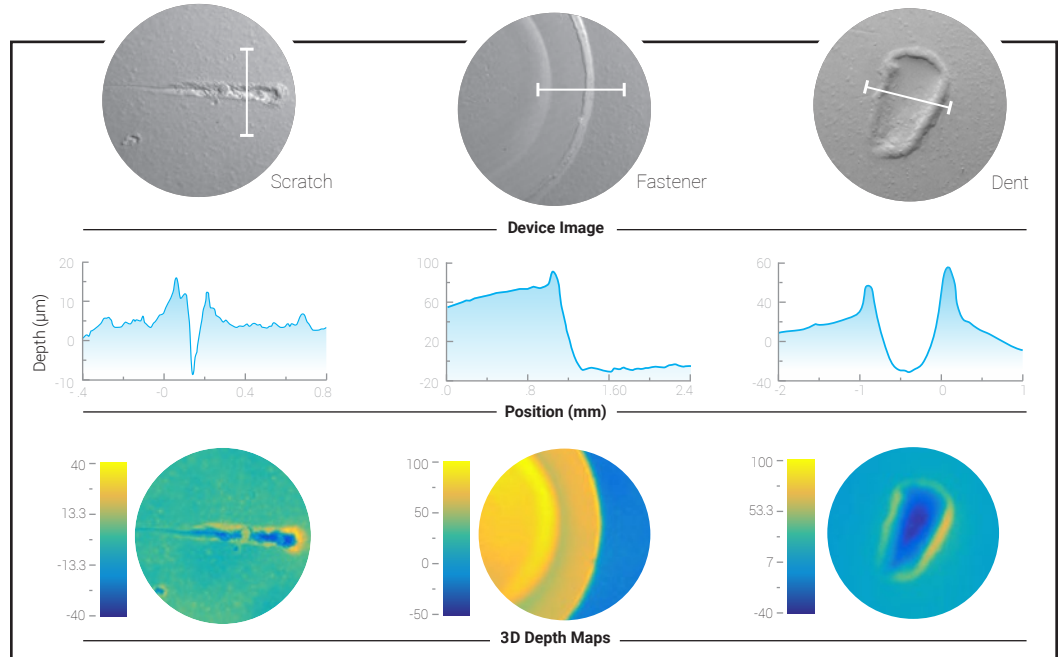
How it Works

Elastomeric Imaging:

The elastomeric sensor conforms to the surface topography, revealing detailed surface features regardless of lighting conditions or material reflectivity, e.g., specularly or translucency. The surface detail is displayed on contact, giving instant visual feedback.

3D Measurement:

The 3D depth map is calculated from images of the surface, providing position, depth, and other derived surface measurements at a high resolution.



Specifications

Standard Device	6cm x 6cm x 16cm, 500 g
Extended View Device	6cm x 6cm x 22cm, 600 g
Resolution	5 MP camera, 75 FPS
Sensitivity (Z)	<1 Micron
Capture Speed	100ms
3D Data Speed	3D data available in seconds
Interface	USB 3.0 to Tablet or Laptop
Tablet Included	Microsoft Surface Pro
Standard Field-of-View Option	8.4mm x 7.1mm
Extended Field-of-View Option	16.9mm x 14.1mm