

# **Automotive**

## Instant, Portable 3D Surface Analysis

Body/Paint

**Interior Trim** 

Glass/Plastics

**EV Batteries/Motors** 

Chassis/Assemblies

Precise, objective, repeatable measurements improve yields up to 40% Immediate, in-situ testing reduces downtime.
ROI within weeks

Test any surface, regardless of material, reflectivity, porosity, or transparency Use in applications across Automotive design and production workflows



### Improve Profitability and Productivity

**Improve yields in QA/QC inspection operations** by reducing unnecessary scrap, rework, and other non-quality costs by instantly quantifying and reporting that visually-observed defects are within spec.

**Lower Production Line maintenance costs** by quickly identifying early wear-and-tear of molds, fixturing, and other tooling at the point of use, rather than incurring disassembly and downtime while waiting for lab results.

**Speed time-to-market in R&D and Environmental Test** applications by bringing lab-grade, non-destructive measurements directly to the engineering bench or field locations.

**Reduce CAPEX investment and OPEX costs** such as operator training, re-calibration, and maintenance by deploying a single tool across multiple workflows to analyze and quantify defects on any material, under any lighting conditions, at any time.







## **Application Examples**

Below are examples of in-situ applications for the GelSight Mobile 3D Surface Analysis Tool. In all cases, pass/fail testing and immediate report generation can be performed by the user, with a more detailed analysis achieved in seconds, including 3D rendering. All results can be archived for reporting or long-term trend analysis activities, and testing can be performed on any surface including metal, reflective, glass, translucent, plastic, fiberglass, polymer, rubber, fabric, leather, wood, painted, coated, frozen, and more, under any lighting conditions.

# Early Pit Detection and Corrosion Monitorings

Detect, measure, and report the number of pits, coverage ratio, min/max depths and diameter, and more with high resolution and accuracy.



Pits on a chassis frame



3D Rendering

### Parting Line and Texture Profiling

Test and characterize a variety of textile surfaces, including leather, vinyl, and cloth



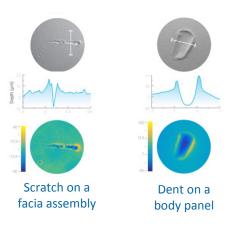
Parting line and texturing of a steering wheel



3D Rendering

#### Pre-Paint Inspection of Scratches and Dents

Directly perform detailed, quantifiable analysis, including depth profiles and 3D rendering, in seconds.



### **Additional Applications**

- Chips / cracks
- Cleaning / solvent residue
- Glass inscription
- Hem fold
- Manufacturing tooling / molds
- Paint defects / orange peel
- Panel flushness

- Pitting
- Roughness / ripple
- Shot peening
- Surface defects / burrs
- Texture / grain / finish
- Tire treads / track surfaces
- · Weld inspection
- And many more

### **Condensed Specifications**

	Series 1	Series 2
	Model 1.0x	Model 0.5x
Dimensions	6cm x 6cm x 22cm	5cm x 5cm x 15.5cm
Weight	600g	400g
Field of View	8.5mm x 7.1mm	17.0mm x 14.2mm
x-y Resolution	3.5um	6.9um
z Sensitivity	<1 um	<1 um
Capture Speed	100mS	100mS
Optional Computer	Microsoft Surface Pro, 12.3"	Microsoft Surface Pro, 13"
Operating System	Windows 10	Windows 11
Interface / Power Source	USB 3.0	USB-C
Data Export Format	tmd, csv, stl, pdf	tmd, csv, stl, pdf

Specifications are subject to change without notice

