Instant, Portable 3D Surface Analysis
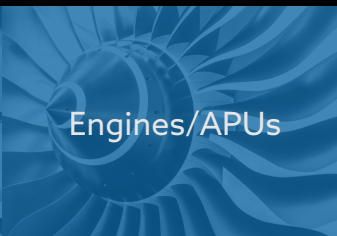
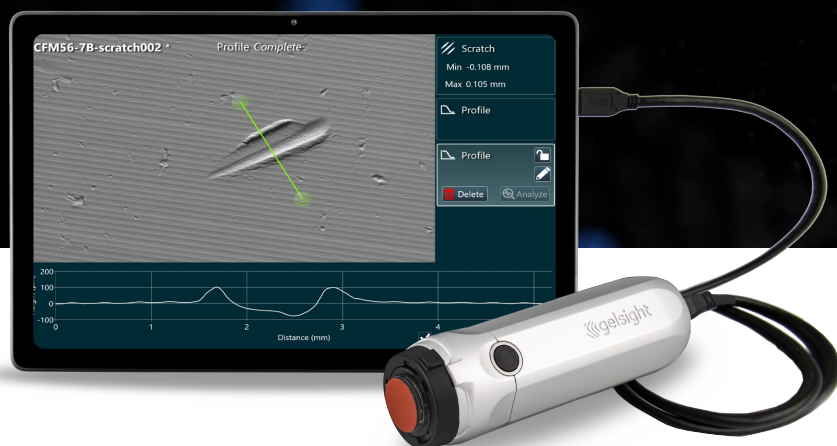VTOL/Rotary Wings   Engines/APUs   Launchers/Satelites   Landing Gear   Aerostructures

Immediate, in-situ testing saves thousands of dollars and man-hours per year. ROI within days or weeks

Precise, repeatable measurements improve yields up to 40%

Use in applications across Military, Aerospace, and Aviation workflows

Test any surface, regardless of material, reflectivity, or transparency

Improve Profitability and Productivity

Lower Direct Maintenance Costs (DMC) in Maintenance/Repair Operations (MRO) by testing in-situ to eliminate costs associated with lab analysis such as disassembly, transportation, downtime, and extra inventory.

Increase fleet availability and Turn Around Time (TAT) in Flightline Inspection workflows by immediately and precisely quantifying surface defects for disposition in the deployed environment, rather than performing teardowns and waiting for lab results.

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

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

Reduce CAPEX investment and OPEX costs such as calibration, training, and maintenance by deploying a single tool across multiple workflows to analyze and quantify defects on any surface, under any lighting conditions.
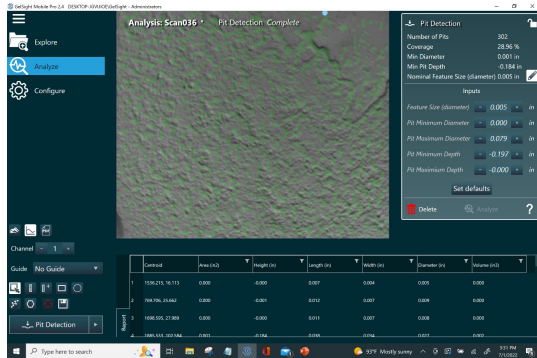
Application Examples

Below are examples of in-situ applications for the GelSight Mobile. In all cases, pass/fail testing and immediate pdf report generation can be performed by the user in seconds, including 3D rendering. All results can be archived or exported for long-term trend analysis. Testing can be performed on any surface, including metallic, glass, composite, plastic, painted, replica material, and more, under any lighting conditions.
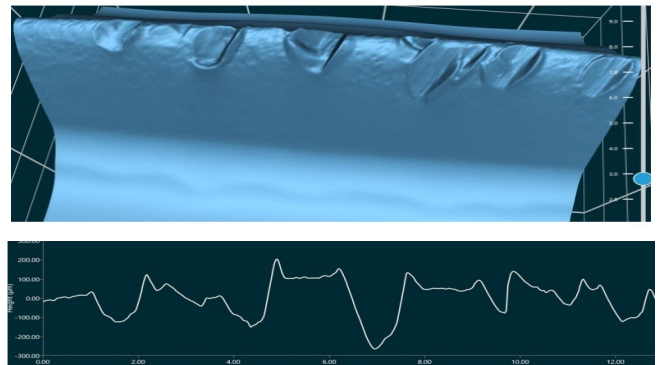
- ## Early Pit Detection & Corrosion Monitoring

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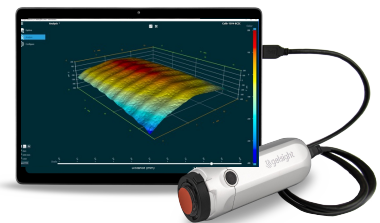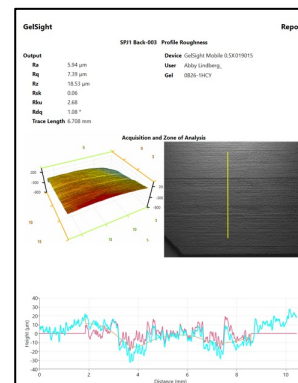

Additional Applications Include:

- Direct Measurement of Replica Material
- Fastener Flushness
- Hole Size
- Profile / Offset
- Roughness
- Shot Peen Finish
- Weld Bead

- ## Scratches & Dents

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

Instantly document results in pdf format or export to .csv, .nm, .tmd, or .stl for further analysis

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, 12.3"
Operating System	Windows 10	Windows 10
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