LAUS ENGINEERING

PRODUCT BROCHURE · SEPTEMBER 2026

LE-TARMAC Scanner

PATENT PENDING

High-resolution 3D surface scanning for road and track. A uniquely large field of view, micron-level resolution, and a workflow that runs from a two-button box on the tarmac to a report in your browser.



240 × 160 mm

Field of view — 5.5× larger than the nearest competitor

3–9 µm

Vertical resolution — with 37-65 µm XY resolution held across the entire 240 × 160 mm field

20 s per scan

Three HDR exposures, captured and combined automatically





NEW — 2026

Redesigned phone app, faster data download and automatic ScannerCloud upload — rolling out now.

Two-button operation

OLED display

Swappable 18 V battery

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TECHNICAL DATA

Field of View (XY)	240 × 160 mm
Field of View (Z)	200 mm
Resolution (Z)	3…9 µm
Resolution (X/Y)	37…65 µm
Acquisition Time	~5 s per snapshot (~20 s for 3 HDR exposures)
Multi-exposure HDR	Automatic — combined into a single result
Output Data	Elevation (Z), intensity, GPS location
Data Format	HDF5 (.h5), compressed
Data Transfer	USB export via web app — now significantly faster
Cloud Upload	ScannerCloud — automatic WiFi upload (rolling out)
Scan Comments	Per-scan annotations via phone app
Battery	18 V industrial battery, easy swap
Autonomy	Up to 60 scans; quick battery change
Display	OLED, high contrast, sunlight readable
Operation	2 buttons (ON/OFF, SCAN) + phone/tablet web app

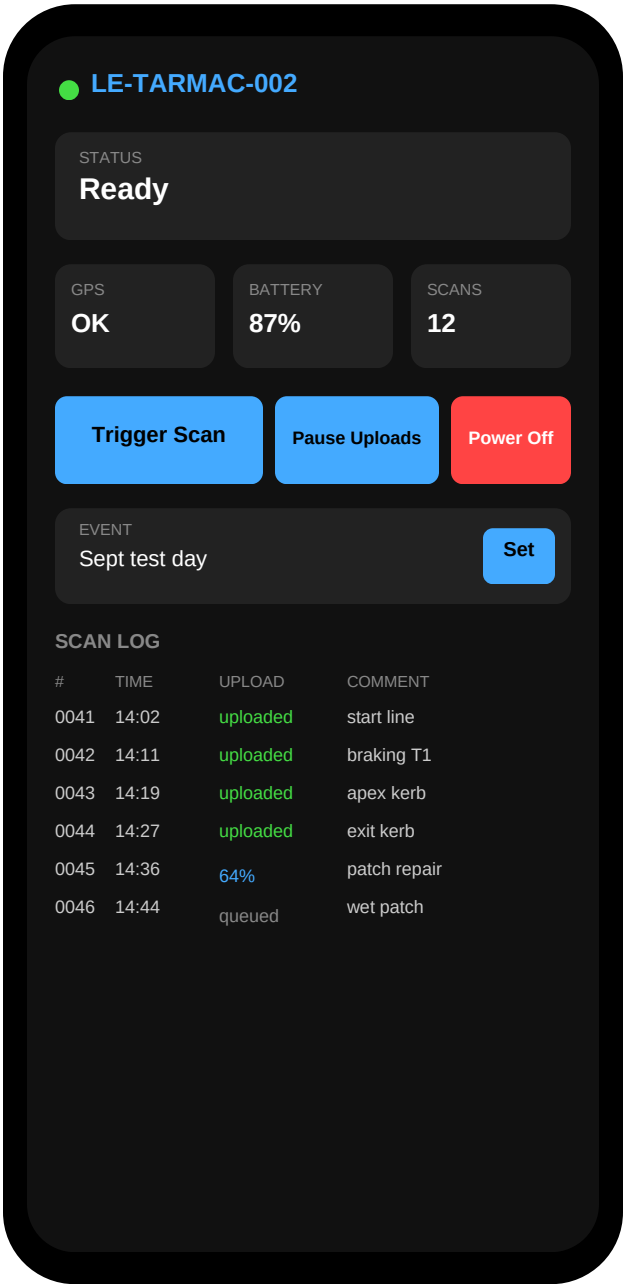
HIGHLIGHTS

- Large field of view — 5.5× larger than the nearest competitor
- Fast acquisition — ~5 s per snapshot with automatic HDR combination
- Dual output — 3D topography + intensity map (bitumen content)
- No compromise on resolution — 3–9 µm (Z), 37–65 µm (XY)
- Redesigned phone app — live status, one-tap scan, per-scan comments, upload tracking
- Faster data download — scans reach your USB key in ~5s per scan
- ScannerCloud — scans upload automatically and appear in your browser (rolling out now)

Laus Engineering's LE-TARMAC Scanner is a portable optical device designed for accurate and efficient characterisation of road and track surface texture.
Drawing on extensive experience with existing market solutions, it has been designed to overcome the practical issues that limit other scanners: a uniquely large field of view, fast acquisition, and robust portability with simple operation and seamless data handling.
With a simple two-button interface and companion phone app, the scanner captures high-resolution 3D surface topography and intensity maps, providing insights into both roughness metrics and bitumen content. Users annotate each scan directly from their phone, and multiple exposures are automatically combined using HDR processing for optimal results across surfaces with mixed reflectivity. Data is exported to USB via the web app — or uploaded automatically to ScannerCloud, where every scan is processed into an interactive report. No proprietary software is required to access the data.

CONTROL IT FROM YOUR PHONE

The scanner hosts its own WiFi web app — connect with any phone or tablet, no installation required. Redesigned for 2026.



A completely redesigned interface

- **Live status:** state, GPS fix, battery and scan count at a glance
- **One-tap scan trigger:** fire a scan without touching the unit
- **Upload tracking:** watch each scan reach the cloud in real time
- **Per-scan comments:** annotate scans as you take them
- **Event tagging:** group scans by session or campaign
- **WiFi network picker:** scan and join site networks from a dropdown
- **One-tap disk clean-up** when storage runs low
- **Stay logged in:** no re-login every time you pick up your phone

Screens illustrative — example data shown.

YOUR DATA, EVERYWHERE — SCANNERCLOUD

Every scan uploads automatically over WiFi. Browse your scans and open the interactive analysis report from any browser — rolling out to customers now.

https://scannercloud … /scans — your workspace

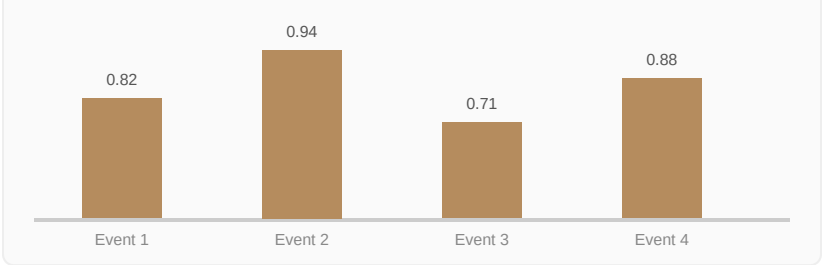
DATE	SCANNER	EVENT	OPERATOR	SCANS	STATUS
2026-08-30	LE-TARMAC-002	Circuit A — Sept test	operator.fl	24	✓ synced
2026-08-30	LE-TARMAC-002	Circuit A — Sept test	operator.gm	18	✓ synced
2026-08-14	LE-TARMAC-002	Airfield — trial day	operator.fl	31	✓ synced
2026-07-22	LE-TARMAC-002	Circuit B — summer survey	operator.ab	12	✓ synced
2026-07-21	LE-TARMAC-002	Circuit B — summer survey	operator.ab	9	⟳ uploading

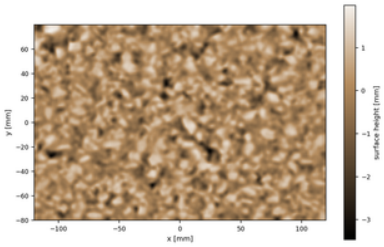
THE INTERACTIVE ROUGHNESS REPORT — INCLUDED

Surface roughness report — example client

Generated 2026-09-01 · Laus Engineering · ISO 25178-2 metrics

EVENTS	SCANS	LATEST
4	128	2026-08-30





surface height map

SCAN	Sq [mm]	Ra [mm]	MPD [mm]	Int	FLAG
0041	0.412	0.331	0.86	142	
0042	0.398	0.319	0.79	138	
0043	0.445	0.356	0.94	151	⚠
0044	0.421	0.338	0.88	145	
0045	0.387	0.310	0.75	133	



scan zones

Metrics table randomised. The full report includes per-scan z & intensity contours, per-event distributions, GPS map view, scan exclusions and Excel export.