PORTABLE OPTICAL PROBE FOR FREESCAN TRAK

# FreeProbe 2 / 2 Pro

## Portable and Wireless Probing Solution

A wireless handheld probe that adds point-based measurement to the FreeScan Trak system. The tracker follows the probe in real time, so hard-to-reach or non-scannable features are measured in the same setup as the scan, with no fixed arm and no cables.



| 0.025 mm | 0.062 mm | ISO 10360 |
|---|---|---|
| ACCURACY | VOLUMETRIC @ 12 M³ | CERTIFIED |

Wireless & Portable · Various Probe Tips · Deep Probing Capability · Quick Setup · Certified ISO 10360 · Seamless Software Integration



FreeProbe 2 on a cast housing, with the Trak Nova's UE Nova tracker on the tripod behind it. The tracker locates the probe tip in real time.

### Portable Probing for Shop-Floor Measurement

Paired with a FreeScan Trak tracker, the FreeProbe Series gives you metrology-grade point measurement anywhere the tracker can see the probe. There is no arm to set up, so it works across environments and part sizes.

**FreeProbe 2.** Efficient, reliable probing for everyday inspection.

**FreeProbe 2 Pro.** Deeper probing, even when some marker plates are blocked.



Probing a body-in-white on its fixture. The tracker sits on a tripod a few meters away, and nothing connects it to the probe.

### Wireless & Portable

The probe is fully wireless, so you move freely around the part without cables. That makes complex setups easier and speeds up the whole inspection.



An extension rod with the L-type adapter reaching into a hole in a body panel, a feature a scanner line cannot see into.

### Various Probe Tips

Two probe tips of different diameters come standard, and each adapts two ways.

**Extended probing.** Add the extension rod to reach deep or recessed features.

**L-type tips.** Join the rod and an adapter for tight or obstructed areas.



Reaching down inside the rear of a body shell to probe a low point, with part of the probe hidden behind the panel.




The easy grip and multi-function buttons on a light body, so long probing runs on a casting do not tire the hand.

## Deeper Probing Capability

FreeProbe 2 Pro keeps probing stable even when some of its marker plates are partly blocked, so the job does not stop when the part gets in the way.

## Ergonomic and Quick to Start

**Fast pairing.** Wireless pairing takes seconds, so measuring starts right away.

**Easy grip.** A lightweight body and ergonomic handle reduce fatigue.

**Multi-function buttons.** An intuitive button layout keeps precise work simple.

## Seamless Software Integration

Works with major inspection software, including SHINING3D Inspect, PolyWorks and Geomagic Control X, for easy data transfer and streamlined quality control.

| | | |
|---|---|---|
| **0.025** mm accuracy | **100** measurements per second | **0.062** mm volumetric 12 m³, Trak Nova |

## Proven on the Production Floor

The OEM's application photos show the FreeProbe on automotive body-in-white and powertrain castings, where hidden points and holes need a touch probe.



Body side frame: hole and edge points probed where the operator stands, next to the fixture.



Roof rail: points above head height probed from inside the shell.



Rear body: the tracker holds the reference from outside the shell while the operator probes the trunk area.



Powertrain casting: a machined boss probed directly on the bench.

## FreeProbe 2 or FreeProbe 2 Pro

Both share the same 0.025 mm accuracy and work with the FreeScan Trak Nova and Trak ProW. FreeProbe 2 is the lighter choice for everyday inspection. FreeProbe 2 Pro is longer, keeps probing when some marker plates are blocked, and runs much longer per battery set.

**16 h** FreeProbe 2
2 batteries

**80 h** FreeProbe 2 Pro
2 batteries

## Certified Accuracy: ISO/IEC 17025 Laboratory

The accuracy figures in this brochure are verified, not estimated. The SHINING 3D Accuracy Laboratory is accredited to ISO/IEC 17025 by CNAS, and the FreeProbe Series is certified there to ISO 10360, with measurements traceable to international standards. That is the record your quality manager, and your customer's auditor, will ask for.



Large-volume hall: reference scale bars set the traceable length standard for volumetric accuracy tests.



Long-range rail: depth-of-field and working-distance performance verified along a calibrated track.



Calibration benches: instruments are verified to VDI/VDE 2634 and ISO 10360 before a certificate is issued.

## Specifications

| Specification | FreeProbe 2 | FreeProbe 2 Pro |
|---|---|---|
| Compatible trackers | FreeScan Trak Nova & FreeScan Trak ProW | |
| Accuracy | 0.025 mm (0.00098 in) | |
| Measurement rate | 100 measurements/s | |
| Volumetric accuracy (with Trak Nova) | 0.062 mm (12 m³)<br>0.00244 in (423.78 ft³) | |
| Volumetric accuracy for extension (with Trak Nova) | 0.046 mm + 0.012 mm/m<br>0.00181 in + 0.00014 in/ft | |
| Volumetric accuracy (with Trak ProW) | 15.6 m³ (3.5 m from the tracking bar): 0.046 mm<br>45 m³ (5 m): 0.063 mm · 76 m³ (6 m): 0.088 mm<br>128 m³ (7.2 m): 0.127 mm · 206.7 m³ (8.6 m): 0.146 mm | |
| Volumetric accuracy for extension (with Trak ProW) | 0.044 mm + 0.012 mm/m | |
| Probe tips | 2 tip diameters; extension rod and L-type adapter | |
| Weight | 0.46 kg (1.0 lb) | 0.59 kg (1.3 lb) |
| Dimensions | 50 × 110 × 363 mm<br>(1.97 × 4.33 × 14.29 in) | 50 × 113.5 × 454.5 mm<br>(1.97 × 4.47 × 17.89 in) |
| Battery (2 included) | 14500 cell, up to 16 h continuous | 21700 cell, up to 80 h continuous |
| Accuracy certification | ISO 10360 certified (ISO/IEC 17025 accredited lab) | |

ISO 10360 · ISO/IEC 17025 ACCREDITED LAB

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Rev.1 TECHNOLOGIES