3D SCANNING EQUIPMENT & CAPABILITIES

HandySCAN BLACK|Elite handheld 3D scanner

The Creaform HandySCAN BLACK|Elite is the highest-specification scanner in the HandySCAN 3D line — metrology-grade accuracy, ISO 17025-accredited traceability, and the fastest measurement rate in the range. Built for the most demanding inspection and reverse engineering work, on any surface, in any environment.



HandySCAN BLACK|Elite

Blue Laser · 0.025 mm Accuracy · 11 Laser Crosses · 1,300,000 measurements/s

AVAILABLE NOW FROM D2 RENTALS — FUNCTION-CHECKED, COMPLETE, FIELD-READY.

The highest accuracy in the range. Fully traceable.

Scanner Capabilities

Blue Laser · 11 Crosses · ISO 17025 Traceability

- Multiple blue laser technology — 11 blue laser crosses (plus an extra line) capture fine detail and large volumes rapidly, including on dark and reflective surfaces.
- Accuracy up to 0.025 mm — the highest single-point accuracy in the HandySCAN 3D range.
- Volumetric accuracy 0.020 mm + 0.040 mm/m — tight, part-size-based accuracy across small and large components alike.
- ISO 17025-accredited acceptance testing — based on VDI/VDE 2634 part 3, with full traceability to international standards; delivered with a personalised certificate and documented test results.
- Measurement rate up to 1,300,000 measurements/second — the fastest in the range, cutting the time between acquisition and workable mesh.
- Measurement resolution 0.025 mm / mesh resolution 0.100 mm — fine surface detail for high-fidelity CAD reference and inspection.
- Laser class 2M (eye-safe) — use in open workshop environments without controlled-area laser restrictions.
- Dynamic referencing — both scanner and part can move freely during scanning; no tripod or external tracking device required.
- Set-up in under 2 minutes — self-positioning via reflective targets, suitcase-portable at 0.94 kg.

Applications

Built for the most demanding metrology work

- High-precision quality control & inspection — traceable, repeatable measurements for quality-critical QA/QC documentation.
- Reverse engineering — capture complex or undocumented components as accurate CAD reference models.
- Product development & design — validate intricate surfaces and iterate quickly against design intent.
- Maintenance, repair & overhaul — digitise worn parts for refurbishment, remanufacture, and fitment checks.
- Non-destructive testing support — capture surface geometry for integrity and condition assessment.
- Aerospace, automotive & heavy industry — versatile across part sizes from 0.05 m up to 4 m.
- Difficult surfaces & environments — reliable results on shiny, dark, and complex geometry, in workshop or field conditions.
- Digital archiving — accurate, high-density 3D records for documentation and downstream reuse.

Technical Specifications

Technology	Blue laser (11 crosses + 1 line)	**Accuracy**	Up to 0.025 mm (0.0009 in)
Volumetric acc.	0.020 mm + 0.040 mm/m	**Vol. acc. w/ MaxSHOT**	0.020 mm + 0.015 mm/m
Meas. resolution	0.025 mm (0.0009 in)	**Mesh resolution**	0.100 mm (0.0039 in)
Meas. rate	1,300,000 meas./s	**Laser class**	2M (eye-safe)
Positioning	Reflective target triangulation	**Scanning area**	310 × 350 mm
Stand-off dist.	300 mm	**Depth of field**	250 mm
Part size range	0.05–4 m (recommended)	**Weight**	0.94 kg (2.1 lb)
Connection	USB 3.0	**Operating temp.**	5–40 °C
Certifications	IP50, EC, WEEE	**Acceptance test**	VDI/VDE 2634 pt 3, ISO 17025
Software	VXelements	**Output formats**	.dae .fbx .ma .obj .stl .txt .wrl .x3d .zpr .3mf

Hiring this scanner is more cost-effective than an outright purchase — and lets you access the range's highest-accuracy 3D scanning only when your project needs it.

WHAT DO I NEED TO BOOK A RENTAL?

Provide us with some key documents — then enjoy your hire.

01 Insurance

Insure your rental under a Hired-in (non-owned) equipment cover policy — to the full cost value of the equipment and for the duration of your hire period.

02 Proof of ID

Submit a copy of your passport or driving licence, plus a utility, bank, or council tax statement that matches your name and delivery address.

03 Contact for Quote

No pricing is shown for this equipment. Contact D2 Rentals for availability and a bespoke quote based on your project and hire duration.

READY WHEN YOU ARE

Available now from D2 Rentals — function-checked, complete, and field-ready.

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