FARO Laser ScanArm® V3

NEW — 30% Improved Accuracy

New V3 Laser Line Probe with 30% higher accuracy than V2

NEW — Enhanced Material Scanning

Improved scanning of dark and reflective surfaces without coating

NEW — Smaller, Lightweight Design

V3 Laser Line probe is over 30% lighter and smaller than V2

NEW — 50% Faster Warm-up Time

Start capturing the highest quality data in half the time

Fully Integrated 7-Axis Scanning

No need for interface box or external wiring

NEW — Wireless Scanning

Laser Line Probe is fully compatible with Quantum FaroArm's Bluetooth® *technology*

NEW — Ergonomic, Removable Handle

Provides comfortable stress-free usage

Higher Accuracy. Enhanced Performance. Lighter Weight

The all-new FARO Laser ScanArm V3 is ideal for inspection, point cloud-to-CAD comparison, rapid prototyping, reverse engineering, and 3D modeling. Users can hard-probe measure simple point variations, then laser scan sections for larger volumes of data – without the wasted time of adding/removing attachments, untangling cabling, or importing data from another CMM. Compatible with Geomagic, Polyworks, Rapidform and many other 3rd-party software programs, the ScanArm empowers you to bring top-quality products to market more quickly.

Most Common Applications

Aerospace: Reverse Engineering, Certification, Part Inspection

Automotive: Tool Building & Certification, Alignment, Part Inspection

Metal Fabrication: OMI, First article inspection, Periodic Part Inspection

Molding/Tool & Die: Mold and Die Inspection, Prototype Part Scanning

Features

- Scanhead positioned for better ergonomics and unobstructed hard probing
- Use Laser and Hard Probes seamlessly
- Laser scan up to 19,200 points per second
- No intermediary software running in the background

FARO Laser ScanArm® V3

Laser Line Probe V3 Specifications

Accuracy: .0014" (35µm)
Repeatability: .0014" (±35µm, 2σ)
Stand-off: 3.75" (95mm)
Depth of Field: 3.35" (85mm)
Effective Scan width: Near Field 1.34" (34mm)
Far Field 2.36" (60mm)

Points per line: 640 points/line
Scan Rate: 30 frames/second
30fps x 640points/line = 19,200 points/sec.
LASER: 660nm, CDRH Class II/IEC Class 2M
Weight: 370g

Performance Specifications (Non-Contact)

Model	**6 ft.** (1.8 m)	**8 ft.** (2.4 m)	**10 ft.** (3.0 m)	**12 ft.** (3.7 m)
Fusion	**.0032 in.** (.081 mm)	**.0034 in.** (.086 mm)	**.0049 in.** (.124 mm)	**.0063 in.** (.159 mm)
Platinum	**.0024 in.** (.061 mm)	**.0026 in.** (.065 mm)	**.0034 in.** (.087 mm)	**.0043 in.** (.108 mm)
Quantum	**.0021 in.** (.054 mm)	**.0022 in.** (.056 mm)	**.0029 in.** (.074 mm)	**.0034 in.** (.086 mm)

Performance Specifications (Contact)

Model (Range)	*Single Point Articulation Performance Test (Max-Min)/2*			*Volumetric Maximum Deviation*			*FaroArm Weight*		
7 axis	Fusion	Platinum	Quantum	Fusion	Platinum	Quantum	Fusion	Platinum	Quantum
6 ft. (1.8 m)	**.0018 in.** (.046 mm)	**.0010 in.** (.026 mm)	**.0007 in.** (.019 mm)	**±.0025 in.** (±.064 mm)	**±.0015 in.** (±.037 mm)	**±.0011 in.** (±.027 mm)	**21 lbs.** (9.5 kg)	**21 lbs.** (9.5 kg)	**21 lbs.** (9.5 kg)
8 ft. (2.4 m)	**.0020 in.** (.051 mm)	**.0012 in.** (.030 mm)	**.0008 in.** (.020 mm)	**±.0028 in.** (±.071 mm)	**±.0017 in.** (±.043 mm)	**±.0012 in.** (±.028 mm)	**21.5 lbs.** (9.75 kg)	**21.5 lbs.** (9.75 kg)	**21.5 lbs.** (9.75 kg)
10 ft. (3±.0 m)	**.0035 in.** (.089 mm)	**.0020 in.** (.052 mm)	**.0015 in.** (.039 mm)	**±.0049 in.** (±.124 mm)	**±.0029 in.** (±.073 mm)	**±.0022 in.** (±.055 mm)	**22 lbs.** (9.98 kg)	**22 lbs.** (9.98 kg)	**22 lbs.** (9.98 kg)
12 ft. (3.7 m)	**.0049 in.** (.124 mm)	**.0029 in.** (.073 mm)	**.0020 in.** (.051 mm)	**±.0069 in.** (±.175 mm)	**±.0041 in.** (±.103 mm)	**±.0028 in.** (±.072 mm)	**22.5 lbs.** (10.21 kg)	**22.5 lbs.** (10.21 kg)	**22.5 lbs.** (10.21 kg)

FaroArm Test Methods - (Test methods are a subset of those given in the B89.4.22 standard.)

Single Point Articulation Performance Test (Max-Min)/2: *The probe of the FaroArm is placed within a conical socket, and individual points are measured from multiple approach directions. Each individual point measurement is analyzed as a range of deviations in X, Y, Z. This test is a method for determining articulating measurement machine repeatability.*

Volumetric Maximum Deviation: *Determined by using traceable length artifacts, which are measured at various locations and orientations throughout the working volume of the FaroArm. This test is a method for determining articulating measurement machine accuracy.*

Hardware Specifications

Operating Temp range: 10°C to 40°C (50°F to 104°F)
Temperature Rate: 3°C/5min. (5.4°F/5min.) Max
Operating Humidity range: 0 - 95%, noncondensing
Power Supply: Universal worldwide voltage
85-245VAC,
50/60 Hz

Certifications: MET (UL, CSA Certified) • CE Compliance • Directive 93/68/EEC, (CE Marking) • Directive 89/336/EEC, (EMC) • FDA CDRH, Subchapter J of 21 CFR 1040.10
Electrical Equipment for Measurement, Control & Lab Use
EN 61010-1:2001, IEC 60825-1, EN 61326
Electromagnetic Compatibility (EMC)
EN 55011, EN 61000-3-2, EN 61000-3-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11

ISO 9001 BUREAU VERITAS Certification

GSA Contract Holder

To learn more, visit www.faro-Arm-asia.com

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