

FARO Laser ScanArm® V3



NEW — 30% Improved Performance

New Laser Line Probe V3 with 30% higher accuracy (compared to predecessor)

NEW — Enhanced Material Scanning

Improved scanning of dark and reflective surfaces without coating

NEW — Smaller, Lightweight Design

Laser Line Probe V3 is over 30% lighter and smaller

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 all FaroArms' 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 programmes, 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

Laser Line Probe V3 Specifications

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

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

Performance Specifications (Non-Contact)

Model	1.2m (4ft.)	1.8m (6ft.)	2.4m (8ft.)	3.0m (10ft.)	3.7m (12ft.)
Fusion		±.081mm (±.0032in.)	±.086mm (±.0034in.)	±.124mm (±.0049in.)	±.159mm (±.0063in.)
Platinum	±.053mm (±.0021in.)	±.061mm (±.0024in.)	±.065mm (±.0026in.)	±.087mm (±.0034in.)	±.108mm (±.0043in.)
Quantum		±.054mm (±.0021in.)	±.056mm (±.0022in.)	±.074mm (±.0029in.)	±.086mm (±.0034in.)

Performance Specifications (Contact)

Model (7 axis)	Single Point Articulation Performance (Max-Min)/2			Volumetric Maximum Deviation			FaroArm Weight		
	Fusion	Platinum	Quantum	Fusion	Platinum	Quantum	Fusion	Platinum	Quantum
1.2m (4ft.)		±.018mm (±.0007in.)			.025mm (.0010in.)			9.3kg (20.5lbs.)	
1.8m (6ft.)	±.046mm (±.0018in.)	±.026mm (±.0010in.)	±.019mm (±.0007in.)	.064mm (.0025in.)	.037mm (.0015in.)	.027mm (.0011in.)	9.5 kg (21lbs.)	9.5kg (21lbs.)	9.5kg (21lbs.)
2.4m (8ft.)	±.051mm (±.0020in.)	±.030mm (±.0012in.)	±.021mm (±.0008in.)	.071mm (.0028in.)	.043mm (.0017in.)	.030mm (.0012in.)	9.75kg (21.5lbs.)	9.75kg (21.5lbs.)	9.75kg (21.5lbs.)
3.0m (10ft.)	±.089mm (±.0035in.)	±.052mm (±.0020in.)	±.039mm (±.0015in.)	.124mm (.0049in.)	.073mm (.0029in.)	.055mm (.0022in.)	9.98kg (22lbs.)	9.98kg (22lbs.)	9.98kg (22lbs.)
3.7m (12ft.)	±.124mm (±.0049in.)	±.073mm (±.0029in.)	±.051mm (±.0020in.)	.175mm (.0069in.)	.103mm (.0041in.)	.072mm (.0028in.)	10.21kg (22.5lbs.)	10.21kg (22.5lbs.)	10.21kg (22.5lbs.)

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. 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 Delta: 3°C/5min. (5.4°F/5min.)
Humidity: 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

