

FARO Laser ScanArm® V3

Higher Accuracy. Enhanced Performance. Lighter Weight.

FARO®



30% Improved Performance

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

Enhanced Material Scanning

Improved scanning of dark and reflective surfaces without coating.

Smaller, Lightweight Design

Laser Line Probe V3 is over 30% lighter and smaller.

50% Faster Warm-up Time

Start capturing the highest quality data in half the time.

Fully Integrated Scanning

No need for interface box or external wiring.

Wireless Scanning

Laser Line Probe is fully compatible with the Bluetooth® technology used in all FaroArm® models.

Ergonomic, Removable Handle

Provides comfortable stress-free usage.

The 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 third party software, 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

Moulding/tool & die: Mould and die inspection, prototype part scanning

Benefits

- ▶ 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 Specifications

Accuracy:	±35µm (±0.0014")	Points per line:	640 points/line
Repeatability:	35µm, 2σ (0.0014")	Scan rate:	30 frames/second x 640 points/line = 19,200 points/sec.
Stand-off:	95mm (3.75")	Laser:	660nm, CDRH Class II/IEC Class 2M
Depth of field:	85mm (3.35")	Weight:	370g (0.82lbs.)
Effective scan width:	Near field 34mm (1.34") Far field 60mm (2.36")		

Performance Specifications

Non-Contact

Measurement Range	1.8m (6ft.)	2.4m (8ft.)	3.0m (10ft.)	3.7m (12ft.)
Fusion	0.081mm (0.0032in.)	0.086mm (0.0034in.)	0.124mm (0.0049in.)	0.159mm (0.0063in.)

Contact

Measurement Range	Repeatability ¹	Accuracy ²	FaroArm Weight
Fusion (7 Axes) 1.8m (6ft.)	0.046mm (0.0018in.)	±0.064mm (±0.0025in.)	9.5kg (21.0lbs.)
Fusion (7 Axes) 2.4m (8ft.)	0.051mm (0.0020in.)	±0.071mm (±0.0028in.)	9.75kg (21.5lbs.)
Fusion (7 Axes) 3.0m (10ft.)	0.089mm (0.0035in.)	±0.124mm (±0.0049in.)	9.98kg (22.0lbs.)
Fusion (7 Axes) 3.7m (12ft.)	0.124mm (0.0049in.)	±0.175mm (±0.0069in.)	10.21kg (22.5lbs.)

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

¹ Single point articulation performance test (Max-Min)/2: The probe of the FaroArm is placed within a conical socket, Q and individual points are measured from multiple approach directions. Each individual point measurement is analysed as a range of deviations in X, Y, Z. This test is a method for determining articulating measurement machine repeatability.

² 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 - 40°C (50°F - 104°F)
Temperature rate:	3°C/5min. (5.4°F/5min.)
Operating humidity range:	95%, noncondensing
Power supply:	Universal worldwide voltage 85-245VAC 50/60Hz

Certifications: Complies with the following EC Directives: 93/68/EEC CE Marking; 2004/108/EC ELECTRICAL EQUIPMENT; 1999/5/EC R&TTE Directive; 2002/95/EC - RoHS • Conforms to the following standards: EN 61010-1:2001 / CSA-C22.2 No. 61010-1; EN 61326-1:2006; IEC 60825-1:2007; FDA (CDRH) 21 CFR 1040.10 / ANSI Z136.1-2007; IEEE 802.11 b/g; FCC Part 15 Subpart C / IC RSS-210 and ESTI EN 300/301 (WLAN and Bluetooth) Pat. 5402582, 5611147, 5794356, 6366831, 6606539, 6904691, 6925722, 6935036, 6973734, 6988322, 7017275, 7032321, 7043847, 7051450, 7069664, 7269910, 7735234, 7784194, 7804602, 7881896, RE42055, RE42082

FARO offers optional VDI/VDE 2617-9 certification for an additional charge. Please ask your sales representative for details.



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