

FARO Edge ScanArm® ES

Lightweight and small scanning solution

FARO



Complete Measurement solution

Use laser and hard probes seamlessly to inspect freeform surfaces, increasing the efficiency of inspection processes.

Ergonomic handling

The low weight (222,4g) of the Laser Line Probe and the ergonomic handle design enable ensure fatigue-free work for operators.

Automatic scanning optimization

Software algorithms automatically adjust the scanning parameters for a wide variety of surfaces.

Built-in range finder

Built-in LED indicator lights on the Arm to provide feedback when you are in optimum scanning range.

Wireless scanning

The FARO Laser Line Probe ES is fully compatible with the Bluetooth®, Wi-Fi, USB, and Ethernet ready technologies used in the FARO Edge.

The FARO Edge ScanArm ES combines the flexibility and the functionalities of a FARO Edge measuring Arm with the smallest Laser Line Probe on the market, the FARO Laser Line Probe ES. It's the ideal device for all the users that are looking for an efficient and user friendly solution for probing and scanning tasks enabling to capture materials with challenging surfaces.

The FARO Edge ScanArm ES delivers a good performance at a very competitive price in the industry for a handheld laser scanning system.

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

- ▶ Fatigue-free work
- ▶ Use laser and hard probes seamlessly
- ▶ Scan up to 45,120 points per second
- ▶ Scan reflective or dark color material without special surface preparation

FARO Laser Line Probe Specifications

Accuracy:	±35µm (±0.0014")	Points per line:	752 points/line
Repeatability:	35µm, 2σ (0.0014")	Scan rate:	60 frames/second x 752 points/line = 45,120 points/sec.
Stand-off:	80mm (3.15")	Laser:	660nm, CDRH Class II/IEC Class 2M
Depth of field:	85mm (3.35")	Weight:	222.4g (0.49lbs.)
Effective scan width:	Near field 53mm (2.09") Far field 90mm (3.5")		

Performance Specifications

Contact

Measurement Range (m/ft)	Repeatability* (mm/inch)		Accuracy** (mm/inch)		FaroArm Weight (kg/lbs.)	
	7 axes		7 axes		7 axes	
Edge 1.8 6	0.024	±0.034	10.7	0.0009	±0.0013	23.6
	0.029	±0.041	10.9	0.0011	±0.0016	24.1
Edge 2.7 9	0.064	±0.091	11.3	0.0025	±0.0035	24.9
	0.029	±0.041	10.9	0.0011	±0.0016	24.1
Edge 3.7 12	0.024	±0.034	10.7	0.0009	±0.0013	23.6
	0.029	±0.041	10.9	0.0011	±0.0016	24.1

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, 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.

**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 100-240VAC 47/63Hz

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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