

Manchester Metrology LTD

Portable Measurement Solutions

FARO® Prime

www.Manchester-Metrology.co.uk



Temperature & Overload Sensors

Located in each joint, they allow the arm to "feel" and react to thermal variations and improper handling for maximum accuracy.

Multi-Probe Capability

Including various ball diameters, custom extensions and optional touch sensitive probe.

Internal Counterbalancing

Internal counterbalancing provides comfortable stress-free usage.

Extended-Use Battery

Integrated extended-use battery provides true 'measure anywhere' capability.

Bluetooth® Wireless Operation

Inspect and digitize wirelessly up to 10m (30ft.) away.

Available in five working lengths and 6-axis configuration, the FARO Prime delivers the highest FaroArm® accuracy at an amazing value. Equipped with Bluetooth® technology, the Prime eliminates the need to tether the device to a laptop. An extended-use battery and composite material construction ensure shop floor durability, day after day. Together, these features make the FARO Prime the ideal solution for basic measurements in inspection, reverse engineering, CAD-to-part analysis and for anything else where a high-accuracy, hard-probing measurement solution is needed.

Most Common Applications

Aerospace: Alignment, tooling & tool certification, part inspection

Automotive: Tool building & certification, alignment, part inspection

Metal fabrication: OMI, first article inspection, periodic part inspection

Moulding/tool & die: Mold & die inspection, prototype part scanning

Benefits

- ▶ Repeatability starting at 0.016mm
- ▶ Exclusive 6-axis availability
- ▶ Infinite rotation flexibility
- ▶ Adaptable 3D measurement technology
- ▶ Composite material construction
- ▶ Available in 5 working volumes



Performance Specifications

Measurement Range	Repeatability ¹	Accuracy ²	Weight
Axes	6	6	6
Prime 1.2m (4ft.)	0.016mm (0.0006in.)	±0.023mm (±0.0009in.)	9.1kg (20.0lbs.)
Prime 1.8m (6ft.)	0.019mm (0.0007in.)	±0.027mm (±0.0011in.)	9.3kg (20.5lbs.)
Prime 2.4m (8ft.)	0.024mm (0.0009in.)	±0.034mm (±0.0013in.)	9.5kg (21.0lbs.)
Prime 3.0m (10ft.)	0.042mm (0.0017in.)	±0.059mm (±0.0023in.)	9.75kg (21.5lbs.)
Prime 3.7m (12ft.)	0.060mm (0.0024in.)	±0.085mm (±0.0033in.)	9.98kg (22.0lbs.)

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: 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 ▪ Pat. 5402582, 5611147, 5794356, 6366831, 6606539, 6904691, 6925722, 6935036, 6973734, 6988322, 7032321, 7043847, 7051450, 7069664, 7269910, D490830, D491210

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



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