

Manchester Metrology LTD

Portable Measurement Solutions

FaroArm® Fusion

www.Manchester-Metrology.co.uk



High Performance, Great Value

15% performance improvement over its predecessor, the FaroArm Titanium.

Temperature & Overload Sensors

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

Bluetooth® Cable-Free Operation

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

Internal Counterbalancing

Internal counterbalancing provides comfortable stress-free usage.

Multi-Probe Capability

Including various ball diameters, curved and extended probes.

Auto Sleep Mode

Automatically turns off unit to save energy and extend component life.

Universal 3.5" Quick Mount

Offers 'Mount-it-where-you-make-it' convenience and less downtime.

To make your products and processes the best in the world, there isn't another portable CMM that combines the precision, durability, technology and cost-effectiveness of the FaroArm Fusion. Higher accuracy, yet lower cost than its predecessor the Fusion is the economical, all-in-one portable tool for performing inspections, tool certification, CAD-to-part analysis, or reverse engineering.

Most Common Applications

Aerospace: Alignment, tooling & mould 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

Features

- ▶ Optional 7-axes availability
- ▶ Infinite rotation for non-stop measuring
- ▶ Extended-use battery
- ▶ Available in four working volumes
- ▶ Composite material construction



Performance Specifications

Measurement Range	Repeatability ¹		Accuracy ²		FaroArm Weight	
	6	7	6	7	6	7
Fusion 1.8m (6ft.)	0.036mm (0.0014in.)	0.046mm (0.0018in.)	±0.051mm (±0.0020in.)	±0.064mm (±0.0025in.)	9.3kg (20.5lbs.)	9.5kg (21.0lbs.)
Fusion 2.4m (8ft.)	0.043mm (0.0017in.)	0.051mm (0.0020in.)	±0.061mm (±0.0024in.)	±0.071mm (±0.0028in.)	9.5kg (21.0lbs.)	9.75kg (21.5lbs.)
Fusion 3.0m (10ft.)	0.074mm (0.0029in.)	0.089mm (0.0035in.)	±0.104mm (±0.0041in.)	±0.124mm (±0.0049in.)	9.75kg (21.5lbs.)	9.98kg (22.0lbs.)
Fusion 3.7m (12ft.)	0.104mm (0.0041in.)	0.124mm (0.0049in.)	±0.147mm (±0.0058in.)	±0.175mm (±0.0069in.)	9.98kg (22.0lbs.)	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: 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, D607350



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

FARO, THE MEASURE OF SUCCESS, FaroArm, CAM2, ION and FARO Laser ScanArm are registered trademarks and trademarks of FARO Technologies Inc.

Manchester Metrology Ltd
 Greenside Trading Centre
 Greenside Lane
 Droylsden
 Manchester
 M43 7AJ

Tel: 0161 637 8744
 Fax: 0161 925 0944
 info@manchester-metrology.com