

# Fusion FaroArm



## **NEW – Higher Performance, Greater Value**

15% Performance improvement over its predecessor the Titanium FaroArm

## **Temperature Sensors**

Located in each joint, they allow the Arm to react to thermal variations for maximum accuracy and portability

## **NEW – Auto Sleep Mode**

Automatically turn off unit to save energy and extend component life

## **NEW – Bluetooth® Cable-Free Operation**

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

## **Internal Counterbalance**

Internal counter balancing provides comfortable stress-free usage

## **Multi-Probe Capability**

Including various Ball Diameters, Curved and Extended Probes

## **Universal 3.5" Quick Mount**

Universal 3.5" quick-mount offers "Mount-it-where-you-make-it" convenience and less downtime

## **Quality Without Compromise**

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 Fusion FaroArm®. Higher accuracy, yet lower cost than the Titanium – with all the style of the top-of-the line Quantum FaroArm – 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 & Mold 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**

- ▶ *Optional 7-Axis Availability*
- ▶ *Infinite Rotation for Non-Stop Measuring*
- ▶ *Extended-Use Battery*
- ▶ *Available in Four Working Volumes*
- ▶ *Composite Material Construction*



## Performance Specifications

Model (Measuring Range)	Single Point Articulation Performance Test (Max-Min)/2		Volumetric Maximum Deviation		FaroArm Weight		
	axis	6	7	6	7	6	7
Fusion 6 ft. (1.8 m)		<b>.0014 in.</b> (.036 mm)	<b>.0018 in.</b> (.046 mm)	<b>±.0020 in.</b> (±.051 mm)	<b>±.0025 in.</b> (±.064 mm)	<b>20.5 lbs.</b> (9.3 kg)	<b>21 lbs.</b> (9.5 kg)
Fusion 8 ft. (2.4 m)		<b>.0017 in.</b> (.043 mm)	<b>.0020 in.</b> (.051 mm)	<b>±.0024 in.</b> (±.061 mm)	<b>±.0028 in.</b> (±.071 mm)	<b>21 lbs.</b> (9.5 kg)	<b>21.5 lbs.</b> (9.75 kg)
Fusion 10 ft. (3.0 m)		<b>.0029 in.</b> (.074 mm)	<b>.0035 in.</b> (.089 mm)	<b>±.0041 in.</b> (±.104 mm)	<b>±.0049 in.</b> (±.124 mm)	<b>21.5 lbs.</b> (9.75 kg)	<b>22 lbs.</b> (9.98 kg)
Fusion 12 ft. (3.7 m)		<b>.0041 in.</b> (.104 mm)	<b>.0049 in.</b> (.124 mm)	<b>±.0058 in.</b> (±.147 mm)	<b>±.0069 in.</b> (±.175 mm)	<b>22 lbs.</b> (9.98 kg)	<b>22.5 lbs.</b> (10.21 kg)

**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 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

<b>Operating Temp range:</b>	10°C to 40°C (50°F to 104°F)	<b>Operating Humidity Range:</b>	0-95%, noncondensing
<b>Temperature Rate:</b>	3°C/5min. (5.4°F/5min. Max)	<b>Power Supply:</b>	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**



ISO-17025 : 2005  
ACCREDITED  
Certificate # L1147