Portable 3D Measurement Arms – A Decision Guide for Buyers

Use the checklist below to conduct a qualitative and quantitative assessment during your purchase evaluation. All arms are NOT created equal.

KEY EVALUATION POINTS | Assess Before You Buy	FaroArm / ScanArm	Alternative 1	Alternative 2	Alternative 3
ACCURACY ASSESSMENT				
ISO Volumetric Accuracy 1.5m, 6 Axis (Gage Max)[1]	0.0009 in (0.022 mm)			
ISO Volumetric Accuracy 2.0m, 7 Axis (Quantum Max)[1]	0.0010 in (0.025 mm)			
ISO 10360-12 (Contact) Certified Accuracy	✓			
ISO 10360-8 (Non-Contact) Certified (7-Axis)	✓			
RUGGEDNESS & RELIABILITY ASSESSMENT				
IEC 60068-2-6 (Shock & Vibration)	✓			
IEC 60068-2-64 (Shock & Vibration)	✓			
IEC 60068-2-27 (Shock & Vibration)	✓			
IEC 60068-2-1 (Temperature Cycling)	✓			
MIL-STD-810G (Temperature Cycling)	✓			
NON-CONTACT MEASUREMENT ASSESSMENT				
Blue Laser 3D Scanning Integration	✓			
Non-Contact Sphere Location Diameter Error (2.0 m Arm with FAROBlu® Max xR)[2]	0.0012 in (0.03 mm)			
Laser Line Probe Maximum Points per Second	1,200,000			
Maximum Laser Line Probe Frame Rate (FPS)	600			
PRODUCTIVITY & EASE-OF-USE ASSESSMENT				
8-Axis Scanning	✓			
Weight: 7 Axis, 2.0m	21.3lb (9.6 kg)			
Kinematic Intelligent Probes – Change probes without recalibration	✓			
Interchangeable Hard Probe and Non-Contact: without removing either component	✓			
Connectivity: Industrial-Grade Wi-Fi®	✓			
Dual, Hot-Swappable Batteries[3]	✓			

[1] ISO 10360-12: EUNI – Unilateral Distance Error between two points/spheres comparing measured versus nominal values for contact measurement arm
[2] ISO 10360-08: LDIA – Location Diameter. Measures dispersion of the centers of a sphere scanned from five different orientations. It represents the largest distance between any 2 centers
[3] Continuous, uninterrupted operation by swapping batteries.
All accuracy values represent Maximum Permissible Error (MPE)

Portable 3D Measurement Arms – Comparison of FARO® Arms

Use the table below to help determine which FaroArm®/ScanArm is right for you!

KEY EVALUATION POINTS | Assess Before you Buy	**Quantum Max^{E}**	**Quantum Max^{M}**	**Quantum Max^{S}**	**Gage Max**
SIZES, AXES				
7-Axis Arm (Required for Laser Line Probe)	✓	✓	✓	
6-Axis Arm		✓	✓	✓
1.5 Meter				✓
2.0 Meter	✓	✓	✓	
2.5 Meter	✓	✓	✓	
3.0 Meter	✓	✓	✓	
3.5 Meter	✓	✓	✓	
4.0 Meter	✓	✓	✓	
ACCURACY				
Total Accuracy	**GOOD**	**BETTER**	**BEST**	**VERY BEST**
ISO 10360-12 Certified	✓	✓	✓	✓
ISO 10360-8 Annex D Certified (with Laser Line Probe)	✓	✓	✓	
OPTIONS				
8-Axis Scanning Platform	✓	✓	✓	✓
ScanArm (options below)	✓	✓	✓	
FAROBlu xR (High accuracy and resolution)	✓	✓	✓	
FAROBlu xP (Balanced speed and accuracy)	✓	✓	✓	
FAROBlu xS (High speed and coverage)	✓	✓	✓	
FEATURES				
Hot-Swappable Battery Capability	✓	✓	✓	Optional
Dual Interchangeable Kinematic Probe and LLP Mounts	✓	✓	✓	
High-Speed WiFi	✓	✓	✓	Optional
Bluetooth	✓	✓	✓	Optional

For more information, call 800.736.0234 or visit www.faro.com