FARO Edge and ScanArm ES
Features, Benefits & Technical Specifications

FARO®

Edge and ScanArm

The world's most innovative measurement arm

As the industry leader, FARO once again raises the bar in portable measurement with the revolutionary FARO Edge. The Edge is the most advanced, state-of-the-art FaroArm® ever introduced.

The Edge features "SmartArm" technology with the first ever integrated personal measurement assistant. With its built-in touchscreen and on-board operating system, the Edge revolutionizes portable metrology by providing stand-alone basic measurement capability.

To compliment the power and precision of the Edge, the FARO Laser Line Probe attachment creates the revolutionary Edge ScanArm® ES, providing unparalleled non-contact measurement capabilities. The ScanArm ES is the latest advancement in FARO's Laser Line Probe product line and features Enhanced Scanning Technology (EST). EST is the combination of multiple hardware and software improvements designed to boost performance by improving the ability to scan challenging surfaces.

The FARO Edge ScanArm ES is the world's smallest, lightest, and most affordable solution that combines the convenience of a FaroArm with the power of a Laser Line Probe to form the perfect contact/non-contact portable measurement system.

How the Edge works

It is easy to understand how the FaroArm works. First, there is a probe at the end of the FaroArm that takes measurement points on command. These probes can be exchanged with other probes depending on the surface or material being measured. A user simply clicks a button on the end of the FaroArm to record a point and special encoders compute the exact position of the probe within a three-dimensional space. This point is recorded in the software and the user moves on to take another measurement.

Edge and ScanArm

Features of the Edge

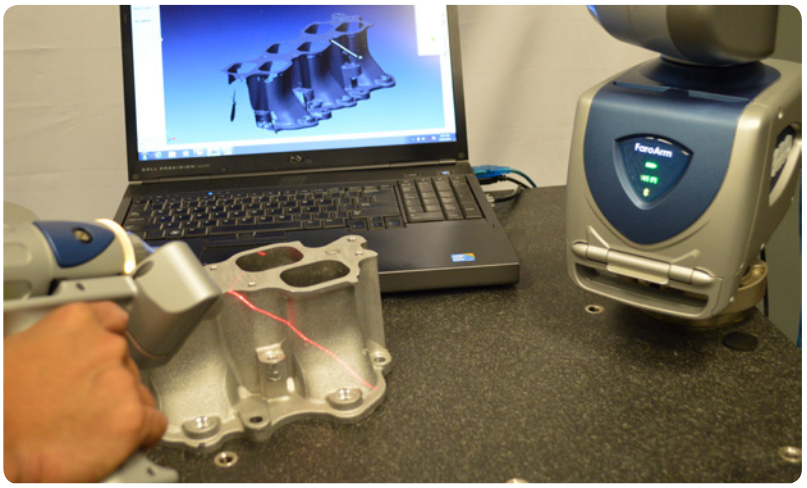
Intuitive On-Board Measurement System
- Built-in touchscreen computer
- QuickTools
- Personalized settings
- On-board diagnostics
- Laptop-free basic measurements

Ergonomics
- Reduced user supported weight
- Better distribution and balance

Multi-Function Handle Port
- Quick-change handle
- Seamless and interchangeable accessory integration
- Expandable capability

Smart Sensor Technology
- Stress sensors warn against excessive external loads
- Temperature Sensors correct for thermal changes
- Tilt/Motion Sensors detect setup problems

Connectivity
- *Bluetooth*, Wi-Fi, USB, and Ethernet ready
- Multiple device management through networking



Features of the ScanArm ES

Enhanced Scanning Technology
- Improved hardware to boost laser performance
- New software algorithms automatically optimize scanning parameters
- Effortlessly scan materials with challenging optical qualities

Excellent Data Quality
- Reflection filters for improved noise reduction
- Scan dark or reflective materials without special surface preparation

High Contrast Capture Mode
- New HDR (High Dynamic Range) Mode captures and combines multiple images into single optimized scan lines

Exceptional Speed
- Advanced CMOS technology
- Over 45,000 points per second

Automatic Range Finder
- Built-in LED indicator lights provide feedback for optimum scanning range

Incredibly Small and Unobtrusive
- Adds only 2.7oz. (76.6g) to the FARO Edge handle
- Can be permanently attached without interfering with contact measurements

Benefits to the end user

- Improved reliability and capability
- Quick measurements without a computer
- Diagnose setup issues affecting performance
- Enhanced ergonomics, less fatigue
- Simplified user experience

Benefits to the company

- Reduced measurement times
- Generate automatic reporting
- Increased productivity and efficiency
- Meet quality standards
- Deliver products more quickly

FARO Edge and ScanArm ES

www.faro.com/edge

Specifications

1.8m (6ft) Measuring Range
Volumetric Accuracy: ±.034mm (±.0013in)
Single Point Repeatability: .024mm (.0009in)
Weight: 10.7kg (23.6lbs)

2.7m (9 ft) Measuring Range
Volumetric Accuracy: ±.041mm (±.0016in)
Single Point Repeatability: .029mm (.0011in)
Weight: 10.9kg (24.1lbs)

3.7m (12 ft) Measuring Range
Volumetric Accuracy: ±.091mm (±.0035in)
Single Point Repeatability: .064mm (.0025in)
Weight: 11.3kg (24.9lbs)

Laser Line Probe Specifications

Accuracy: ±35µm (±.0014in)
Repeatability: 35µm, 2σ (.0014in)
Stand-off: 80mm (3.15in)
Depth of Field: 85mm (3.35in)
Effective Scan width: Near Field 53mm (2.09in), Far Field 90mm (3.54in)
Points per line: 752 points/line
Scan Rate: 60 frames/second, 60fps x 752points/line = 45,120 points/sec
Laser: Class 2M
Weight: **Handle with LLP** - 222.4g (7.8oz)
Handle without LLP - 145.8g (5.1oz)
Difference - 76.6g (2.7oz)

Hardware Specifications

Operating Temp range: 10°C to 40°C (50°F to 104°F)
Temperature Rate: 3°C/5min (5.4°F/5min Max)
Power Supply: Universal worldwide voltage, 100-240VAC, 47 to 63 Hz

Meets OSHA requirements, NRTL Listed, MET-C Listed, Complies with Electronic Code of Federal Regulations 47 CFR PART 15 and 21 CFR 1040 Performance standards For Light-Emitting Products.

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).

Patents: 5402582, 5611147, 5794356, 6366831, 6606539, 6904691, 6925722, 6935036, 6973734, 6988322, 7017275, 7032321, 7043847, 7051450, 7069664, 7269910, 7735234, 7784194, 7804602, 7881896, RE42055, RE42082

Volumetric Accuracy or Volumetric Maximum Deviation: Determined by using 20 traceable lengths measured at locations and orientations throughout the working volume of the FaroArm as specified by the ASME B89.4.22-2004 standard. This test is a method for determining articulated arm accuracy.

Single Point Repeatability or 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 as specified by ASME the B89.4.22-2004 standard. Each individual point measurement is analyzed as a range of deviations in X, Y, Z.

FaroArm test methods are a subset of those given in the B89.4.22 standard. For more details and complete specifications please visit our website.

For more information call 800.736.0234
or visit www.faro.com/edge

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