



API Arm - 7 Axis Portable Measuring Arm

FEATURES & BENEFITS

The API Arm provides an ideal combination of contact and non-contact measurement. The innovative design utilizes advanced materials to provide a reliable, portable, and lightweight coordinate measuring machine.

Simple Operation

Carbon fiber tubes, ergonomic handle, and integrated counterbalance allow scanning with minimal effort.

True Portability

With an integrated battery, WiFi connection, and temperature regulation the arm can perform wherever you need it.

Extended Global Measurement Volume

The API Arm can be paired with an API Laser Tracker to extend the overall working volume of the system while maintaining the highest level of accuracy.

Magnetic Docking

The handle of the arm conveniently attaches to the body when not in use.

Multiple Sizes Available

The API Arm is available in 2m, 2.5m, 3m, 4m, and 4.5m sizes to provide the perfect fit for your application.



SKYLINE SCANNER

The Skyline scanner is an excellent solution for 3D analysis. High speed scanning and 200mm laser line allows you to detect the smallest details in record time. This scanner integrates into the handle with a quick detach feature.



SOLANO BLUE SCANNER

The Solano Blue scanner provides performance and simplicity at an economical price. This standard scanner has a 100mm laser line and works well on reflective surfaces.



PROBE CONNECTIVITY

A probe can be connected directly to the handle for contact measurement. The available probes have auto detection for quick setup.



COMMON APPLICATIONS

- Dimensional Analysis
- Rapid Prototyping
- First Article Inspection
- Reverse Engineering
- Surface Acquisition



TRACKED ARM FOR LARGE PART INSPECTION



- Allows the possibility to use a portable arm to measure large parts (up to 80m). The long range and precision of the API Radian laser tracker adds versatility, flexibility and accuracy to the combination portable measuring solution.
- Overall precision results from the volumetric accuracy of the arm during local measurements, and subsequently from the laser tracker alignment precision.
- The measuring arm is placed on a tripod and moved around the large part in order to measure in several measurement stages. The tracker follows its movements through SMRs placed on the arm. Each position is stored and then associated to the previous ones to obtain a single coordinate system.
- The solution is suited to automotive, aerospace, and energy industries as well as large parts suppliers needing both portability and precision.

TECHNICAL FEATURES

Technical Specifications		SCANNING PERFORMANCE			PROBING PERFORMANCE	
Axis	Working Volume	API Arm w/ EYES	API Arm w/ WIDE	API Arm w/ OPEN	Single Point Repeatability	Volumetric Accuracy
7	2m	0.038mm	0.042mm	0.047mm	0.022mm	0.032mm
7	2.5m	0.044mm	0.048mm	0.053mm	0.027mm	0.038mm
7	3m	0.057mm	0.061mm	0.066mm	0.042mm	0.051mm
7	3.5m	0.068mm	0.072mm	0.077mm	0.054mm	0.062mm
7	4m	0.080mm	0.084mm	0.089mm	0.069mm	0.074mm
7	4.5m	0.095mm	0.099mm	0.104mm	0.078mm	0.089mm

3D Scanner Specifications	ACE SKYLINE EYES	ACE SKYLINE WIDE	ACE SKYLINE OPEN
Max Scanning Speed	600,000 pts/sec	600,000 pts/sec	200,000 pts/sec
Accuracy	± 9 µm	± 15 µm	± 20 µm
Max Laser Line Width	100mm	200mm	100mm
Max Frequency	300Hz	300Hz	200Hz
Laser Class	Blue, Class 2M	Blue, Class 2M	Blue, Class 2M
Line Resolution	25 µm	50 µm	50 µm
Stand-off Distance	90mm	85mm	85mm
Field of View	80mm	110mm	110mm
LED Indicators	YES	YES	NO
Temperature Compensation	YES	YES	NO



15000 JOHNS HOPKINS DRIVE, ROCKVILLE, MD 20850, USA
 PHONE: 240.268.0400 • INFO@APIMETROLOGY.COM
 APIMETROLOGY.COM

API EUROPE
 +49 (0) 6221-729-805-0
 INFO.EU@APIMETROLOGY.COM

API CHINA
 +86 10-59796858
 CHINA@APIMETROLOGY.COM

API BRASIL
 +55 12-3209-0675
 BRASIL@APIMETROLOGY.COM

API INDIA
 +91 -020-48607480
 INDIA@APIMETROLOGY.COM