

METRONOR SOLO

Single camera electro-optical portable coordinate measuring system

- PORTABLE 3D MEASUREMENTS
- BEST-IN-CLASS PRICE/PERFORMANCE
- LIGHTWEIGHT HANDHELD PROBE
- EXTREMELY EASY TO USE
- LARGE OBJECT MEASUREMENT
- IDEAL FOR ROUGH ENVIRONMENTS

Metronor SOLO is a portable CMM system based on Metronor's patented principle that allows for accurate 3D measurements with just a single camera and a handheld probe. Metronor SOLO offers full CMM capability, including comparison of any geometry to CAD data or technical drawing.

Ideally suited where fast set-up, ease of use and high portability is critical, Metronor SOLO offers a superior working volume and can be operated through a wireless connection- without cumbersome arms to balance or cables to untangle.

Highly affordable, Metronor SOLO provides excellent return on investment in industries as diverse as automotive, forging, machining, casting, energy and aerospace – as well as in numerous special applications such as high-radiation nuclear power plant maintenance or custom-fit boat decks.

While highly capable on its own, Metronor SOLO is also a very flexible investment and a wide range of options and upgrade paths are offered, permitting SOLO to grow along with future requirements or needs.



APPLICATIONS INCLUDE:

- Prototyping
- Tool and die inspection
- Tube & pipe measurement
- In-process inspection
- On-machine inspection
- Fixture inspection
- As built documentation
- Large assembly measurement
- Assembly alignment
- Excess material verification in casting/forging
- On-machine alignment of parts for milling/ machining
- Tool building
- Reverse engineering

For more information: www.metronor.com

Technical Specifications

METRONOR SOLO

PERFORMANCE SPECIFICATIONS

Range	Distance From Sensors	1.5 to 25 m (5 to 80')
Measurement Volume	2000 m ³	70.000 ft ³
Accuracy Small Volume - 3D	±0.12 [mm]	Volume up to 1.5 x 1.5 x 1.5 m ³
		Accuracy of 3D length 2 sigma (U95)
Accuracy Casting Volume - 3D	±0.20 [mm]	Volume up to 3.0 x 3.0 x 3.0 m ³
		Accuracy of 3D length (typical)
Accuracy Profile Measurements	±0.16 [mm] (5 m from camera)	600mm wide profile orthogonal to camera optical axis 2 sigma (U95)
	±0.21 [mm] (10 m from camera)	
	±0.43 [mm] (20 m from camera)	
Accuracy Parallelism	±0.0033 [deg]	Parallelism between 2 planes, 1000 mm size 2 sigma (U95)
Accuracy Planarity	±0.06 [mm]	Planarity of single plane, size 2x2m ² 2 sigma (U95)

HARDWARE SPECIFICATIONS

Environment	Operating Temperature	10 to 45°C (50 to 113°F)
	Storage Temperature	-25 to 65°C (-13 to 150°F)
	Operating Humidity	< 95% relative humidity, non-condensing
	Pressure, Humidity, Temperature	No effect on measurement accuracy
	No Warm-up	
Electrical Power	Auto Switching (Battery operation optional)	100-240 V AC, 50-60 Hz
Packaging	System Weight (excl. case)	11 kg (24 lbs)
	Shipping Weight	24 kg (53 lbs)
Computing Unit	Type	Laptop, Windows 11 Professional 64 bit
Sensor Unit (1 incl.)	Type	CCD-based digital camera
	Optical Settings	Fixed aperture and focus, factory optimized
	Field of View	38° x 32°
	Effective Resolution	640,000 x 512,000
	Unit Net Weight	0.80 kg (2 lbs)
Probing Unit	Type	Wireless, handheld with quick-change styli
	Material	Carbon fiber w/embedded active targets
	Styli Included	User configurable set of 7 w/ titanium extensions/angles
	Styli Type	Ruby spheres (incl.), scribe tip (incl.), edge styli (opt.)
	Hidden Point Capability	600 mm (24") - longer with optional probes
	Unit Net Weight	0.52 kg (1.2 lbs)