

# METRONOR SOLO

*Single camera electro-optical portable coordinate measuring system*

- PORTABLE 3D MEASUREMENTS
- BEST-IN-CLASS PRICE/PERFORMANCE
- LIGHT-WEIGHT - 11 KG (24 LBS)
- 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 hand held probe. Metronor SOLO offers full CMM capability including comparison of just any geometry to CAD data or blueprint.

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](http://www.metronor.com)

## Technical Specifications

### SOLO

#### PERFORMANCE SPECIFICATIONS

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

#### HARDWARE SPECIFICATIONS

<b>Environment</b>	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
	Vibration Stability Control (option)	0 - 100 Hz, < 3 mm amplitude
	No warm-up	
<b>Electrical Power</b>	Auto switching (Battery operation optional)	100-240 V AC, 50-60 Hz
<b>Packaging</b>	System weight (excl. cases)	11 kg (24 lbs)
	Shipping weight	24 kg (53 lbs)
<b>Computing Unit</b>	Type	Laptop, Windows 10 Professional 64 bit
<b>Sensor Unit (1 incl.)</b>	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)
<b>Probing Unit</b>	Type	Wireless Handheld, with quick-change styli
	Material	Carbon fibre 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)