

## **METRONOR DUO**

Dual camera electro-optical portable coordinate measuring system

- PORTABLE 3D MEASUREMENTS
- EXTREMELY ACCURATE
- BEST-IN-CLASS PRICE/PERFORMANCE
- EASY TO USE
- LIGHT-WEIGHT 17 KG (38 LBS)
- IDEAL FOR ROUGH ENVIRONMENTS

Metronor DUO is the top-of-range portable CMM system utilising Metronor's patented principle for electro optical coordinate measurements. Metronor DUO combines large volume and increased accuracy with the widest range of applications.

Extremely portable – the complete systems comes in a single, rollaway transport case weighing only 30 kilos (66 lbs) – Metronor DUO provides high-end coordinate measuring capability anywhere in the production process.

Using two cameras and a hand-held, wireless probe, Metronor DUO provides the capability to study any geometry related issue in detail – compare tools, parts and assemblies to CAD or blue-print, use the LED application kit option to efficiently study stability, deformation and process repeatability, or take the system to the supplier or customer to investigate problems with interfacing parts. Metronor DUO also supports efficient alignment of objects in position and orientation (6 DOF) for example in tool building or jig-less assembly.

Metronor DUO- like all Metronor systems- is designed for use in rough shop floor environments and exhibits industry-leading reliability and availability.



#### **APPLICATIONS INCLUDE:**

- Jig-less tooling
- Reverse engineering
- Prototyping
- As built documentation
- Tool and die inspection
- In-process inspection
- On-machine inspection
- Fixture inspection
- Deformation analysis
- Large assembly measurement
- Assembly alignment in position and orientation
- Excess material verification in casting/forging
- On-machine alignment of parts for milling/ machining
- Process repeatability verification
- Root cause analysis check tool, parts,
   variation and interference in single session
- Tool building
- Tool certification

For more information: www.metronor.com



# Technical Specifications METRONOR DUO

### PERFORMANCE SPECIFICATIONS

Range	Distance from sensors	1.5- 15 m (5- 50')
Accuracy	U95 distance measurement accuracy	+/- 0.025 + L/60000 mm

### **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
	Vibration Stability Control (option)	0- 100 Hz, < 3 mm amplitude
	No warm-up	
Electrical Power	Auto switching	100-240 V AC, 50-60 Hz
	(Battery operation optional)	
Packaging –	System weight (excl. cases)	17 kg (38 lbs)
	Shipping weight	30 kg (66 lbs)
Computing Unit	Туре	Laptop, Windows 10 Professional 64 bit
Sensor Unit (2 incl.)	Туре	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 —	Туре	Wireless Handheld, with quick-change styli
	Material	Carbon fibre w/embedded active targets
	Styli	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)