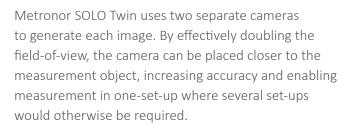


METRONOR SOLO TWIN

Double camera electro-optical portable coordinate measuring system

- WIDE-ANGLE POINT-AND-MEASURE
- WIDE 70° FIELD-OF-VIEW
- GO IN CLOSE FOR MAXIMUM ACCURACY
- IDEAL FOR NARROW AND CROWDED SPACES
- ALIGN, INSPECT PARALLEL SHAFTS OR PLANES
- HIGH ACCURACY ON LARGE OBJECT



During normal operation, the two cameras are mounted together on a special carbon fiber bracket ensuring optimal overlap and excellent stability. Using a fast and simple procedure, the alignment between the two cameras can be re-determined anytime and anywhere, keeping system performance consistent over time — and after any rough handling or transportation.

Metronor SOLO Twin also enables special applications where it is critical to have two separate camera axes that are precisely known relative to each other. Such applications include alignment or inspection of parallel objects such as planes or bores – e.g. in gearboxes, thrusters, turbines, or other machinery.



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 TWIN

PERFORMANCE SPECIFICATIONS

| Distance From Sensors | 1.5 to 25 m (5 to 80') |
|-------------------------------|--|
| ±0.12 [mm] | Volume up to 1.5 x 1.5 x 1.5 m ³ |
| | Accuracy of 3D length |
| | 2 sigma (U95) |
| ±0.20 [mm] | Volume up to 3.0 x 3.0 x 3.0 m ³ |
| | Accuracy of 3D length (typical) |
| ±0.16 [mm] (5 m from camera) | 600mm wide profile orthogonal to camera optical axis |
| ±0.21 [mm] (10 m from camera) | |
| ±0.43 [mm] (20 m from camera) | 2 sigma (U95) |
| ±0.0033 [deg] | Parallelism between 2 planes, 1000 mm size |
| | 2 sigma (U95) |
| 10.00 [mm] | Planarity of single plane, size 2x2m ² |
| ±0.06 [mm] | 2 sigma (U95) |
| | ±0.12 [mm] ±0.20 [mm] ±0.16 [mm] (5 m from camera) ±0.21 [mm] (10 m from camera) ±0.43 [mm] (20 m from camera) |

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) | 12 kg (29 lbs) |
| | Shipping Weight | 26 kg (57 lbs) |
| Computing Unit | Туре | Laptop, Windows 7 Professional 64 bit |
| Sensor Unit (2 incl.) | Туре | CCD-based digital camera |
| | Optical Settings | Fixed aperture and focus, factory optimized |
| | Field of View | 70° x 32° |
| | Effective Resolution | 1.180.000x 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) |