

# Solartron Metrology - Line card

Key Linear Measurement sensors  
for **Aerospace**

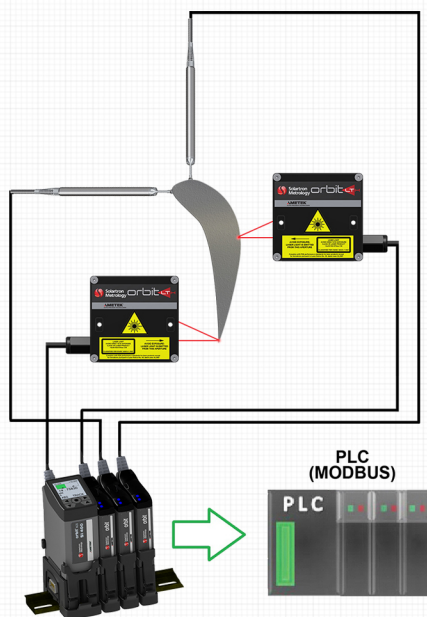
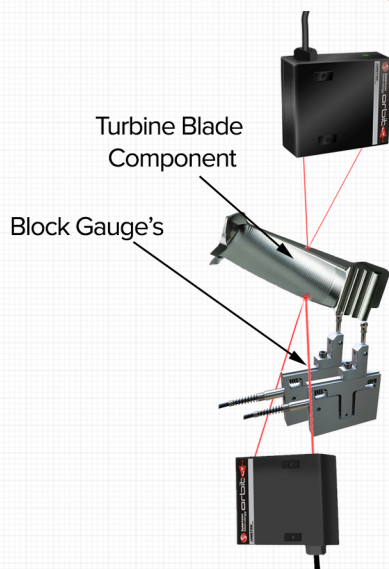


**Accuracy** - Calibrated Instruments that give you the correct measurement time after time

**Simplicity** - With the Orbit® or Orbit® ACS networks, connection to PLC's or a network is simple

**Ruggedness** - Durable probes that have been tested up to 15 million cycles

orbit3 orbit<LTH



## LVDT (Analogue and Digital)

- Spring push, pneumatic, jet, or vacuum retract
  - 8 and 6 mm diameter bodies
  - Extremely rugged (IP65), tested to 13 million cycles, linearity of 0.05%
- Measuring ranges from 0.5 to 20 mm



## Orbit® LT and LTH

- High precision non-contact lasers for gauging
- Up to 0.02% F.S. accuracy and 0.0076 µm resolution (LTH)
- Seamlessly integrates with other Orbit® Digital Probes
- Fast, easy and flexible networking

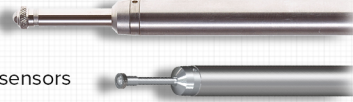
15 and 50mm range for Orbit LT. 2, 10, 20, and 100mm range for Orbit LTH





## Feather/Ultra Feather Touch

- Lighter tip forces for glass, electronics, and other delicate surfaces
  - Feather Touch: As low as 0.3 N of tip force; Can withstand side load
  - Ultra Feather Touch: 0.03 to 0.05 N of tip force; Alternative to non-contact sensors
- Measuring ranges from 2 to 20 mm



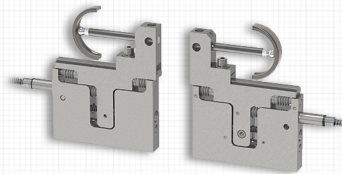
## Compact

- Small (<25 mm length) and robust
  - High resolution (as low as 0.01 µm); High repeatability (as low as 0.15 µm); High accuracy (up to +/- 0.05% of reading, Digital)
- Measuring ranges from 0.5 to 2 mm



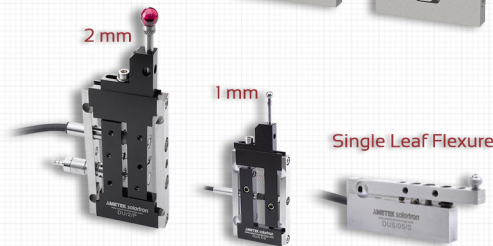
## Block Gauges

- Precision measurements of bores, cavities, and other awkward dimensions
  - Rugged design
  - Multiple configurations, including pneumatic and spring
- 2, 5, and 10 mm measurement ranges



## Flexures

- Ideal for harsher and awkward gauging applications
  - Tested to 20 million cycles; High resolution, repeatability and accuracy
  - Range of sizes
- Measuring ranges from 0.5 to 2 mm



## Mini Probe

- Compact flexure for bore gauging and other tight applications
  - Sideload capability
  - Up to 0.1 µm repeatability
- 0.5 and 1 mm measurement ranges



## WiGauge™

- High precision device using bore and width gauges
- Up to 15 metre transmission range via Class 1 Bluetooth®
- Detachable battery with up to 8 hours continuous life
- Optional LCD screen to view real time measurement data








## Orbit® 3 Network

### Brief Introduction





- A fully formed digital measurement system that makes it simple to interconnect high accuracy Solartron instruments, and other sensors to your computer, network, or PLC
- Calibrated sensors with digitised outputs via Probe Interface Electronics modules
- Network up to 150 units, including 3rd party sensors



### Interface Modules

 <b>MODIM Interface</b> • For Modbus PLC	 <b>Ethernet Interface</b> • Ethernet TCP/IP	 <b>RS232 Interface</b> • Up to 150 sensors	 <b>USB Interface</b> • Dynamic modes available	 <b>Wireless Interface</b> • Connect Orbit® 3 stack to PC via Bluetooth®
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### Input Modules

 <b>Encoder Input</b> • For TTL, incremental	 <b>Analogue Input</b> • For DC or 4-20 mA	 <b>Digital Input/Output</b> • 8 pins I/O into PLC	 <b>Digimatic Input</b> • Compatible to Digimatic Instruments
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### Readouts / Instruments





 <b>SI 1500</b> • Single Channel (LVDT, DC/4-20 mA & Orbit® versions available)	 <b>SI 3500</b> • Dual Channel (LVDT, DC/4-20 mA, & Orbit® versions available)	 <b>SI 5500</b> • Up to 31 Channels	 <b>SI 7500</b> • Up to 16 Channels
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### Orbit® ACS (Automation Control System)

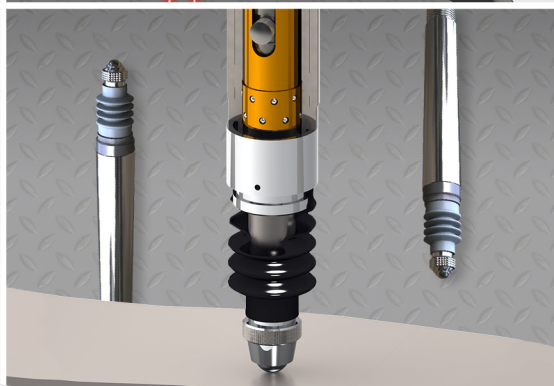
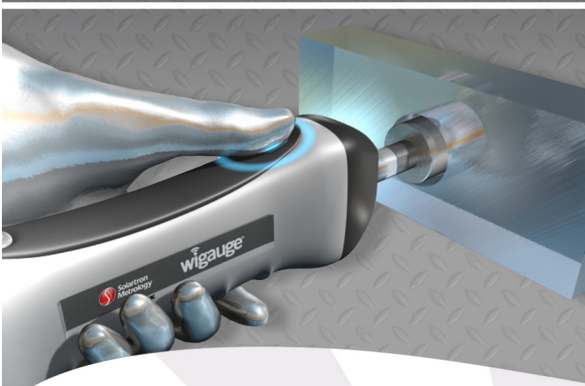
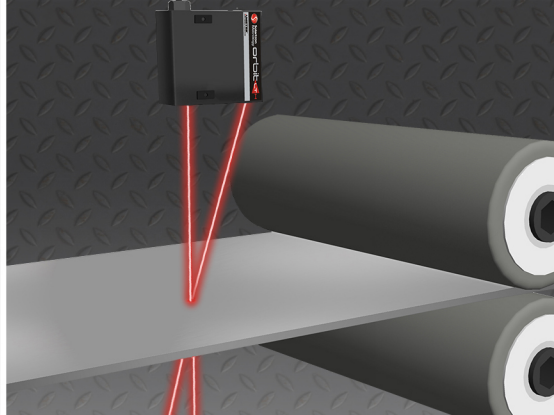
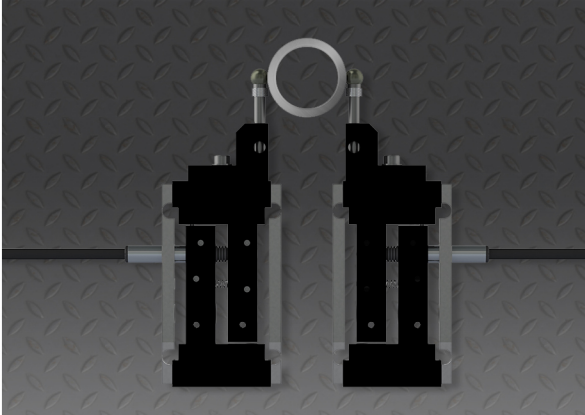
- Stand alone Orbit® systems or built for PLC interface
  - 1-4 channels, with Modbus, RS485, RS232, I/O
  - For use with both Orbit® 3 probes and non-contact lasers
- Pneumatic and spring available from 0.5 to 20 mm range



### Signal Conditioning

 <b>DIN Rail Conditioner</b> • DC, 4-20 mA	 <b>OD Series</b> • AC, DC Power • DC, 4-20 mA options	 <b>BICM</b> • +15/-15 V or 24 V Power • DC output	 <b>Absolute TTL</b> • Incremental or absolute, for TTL
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