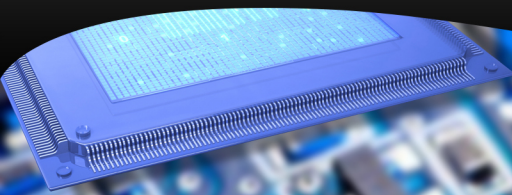


# Solartron Metrology - Line card

Key Linear Measurement sensors  
for **Electronics**

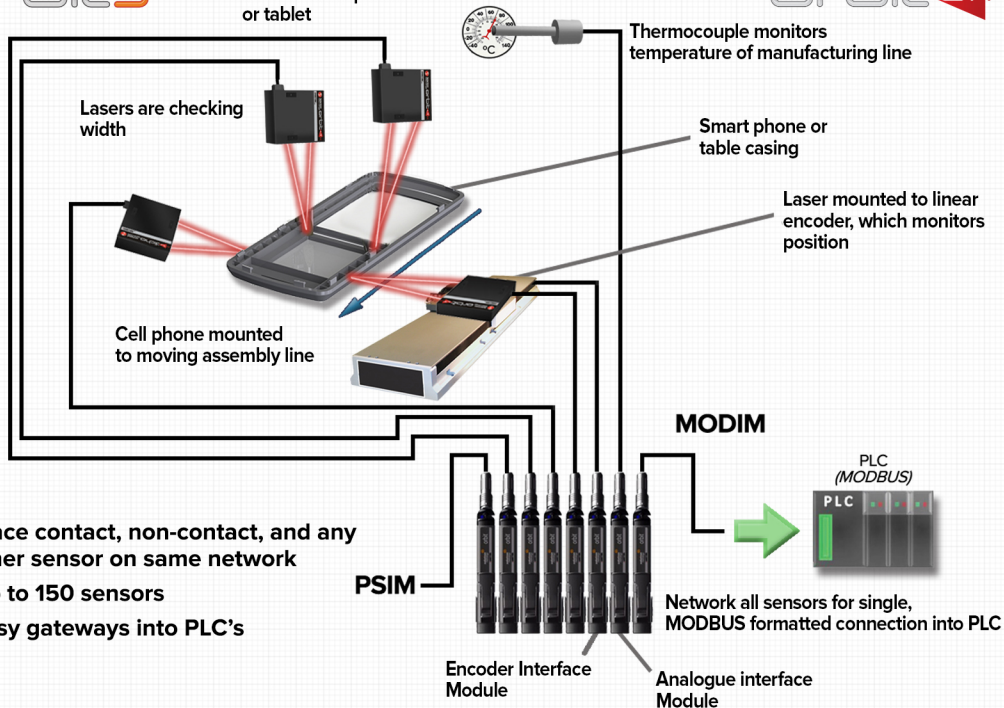


**Accuracy** - Calibrated Instruments that give you the correct measurement time after time  
**Simplicity** - With the Orbit® 3 Network or Orbit® ACS, connection to PLC's or a network is simple  
**No Scratch** - Contact probes with very low tip forces and non-contact sensors for no marring of surfaces

orbit3

lasers are checking internal  
dimension of phone  
or tablet

orbit LTH



- Place contact, non-contact, and any other sensor on same network
- Up to 150 sensors
- Easy gateways into PLC's

## 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

## Non-contact

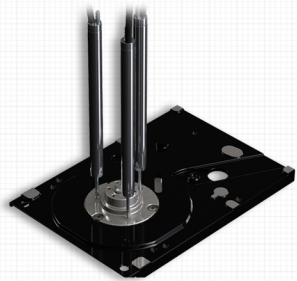
### Orbit® LTH

- 2, 10, 20 and 100 mm ranges
- Up to +/- 0.02% Linearity, 0.0076 micron resolution

### Orbit® LT

- 15 and 50 mm range
- +/- 0.1% Linearity, 1 micron resolution

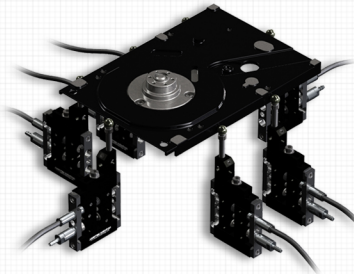




Ultra Feather Touch checking small area on HDD



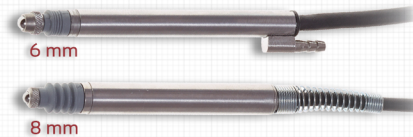
Ultra Feather Touch checking mobile phone glass



Flexures checking perimeter of HDD

### 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



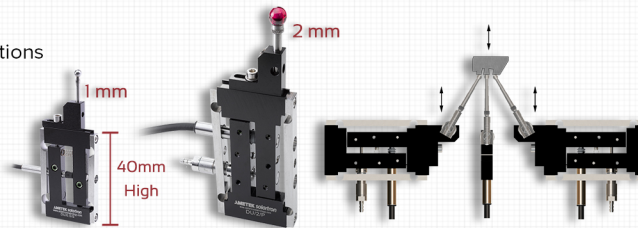
### Compact

- 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

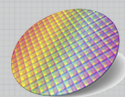


### Flexures

- 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



Checking the components of a Hard Disk Drive



Checking Height of Semi Conductor Wafers

### Signal Conditioning



**DIN Rail Conditioner**

- DC, 4-20 mA



**OD Series**

- AC, DC Power
- DC, 4-20 mA options



**BICM**

- +15/-15 V or 24 V Power
- DC output



**Absolute TTL**

- Incremental or absolute, for TTL






## 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

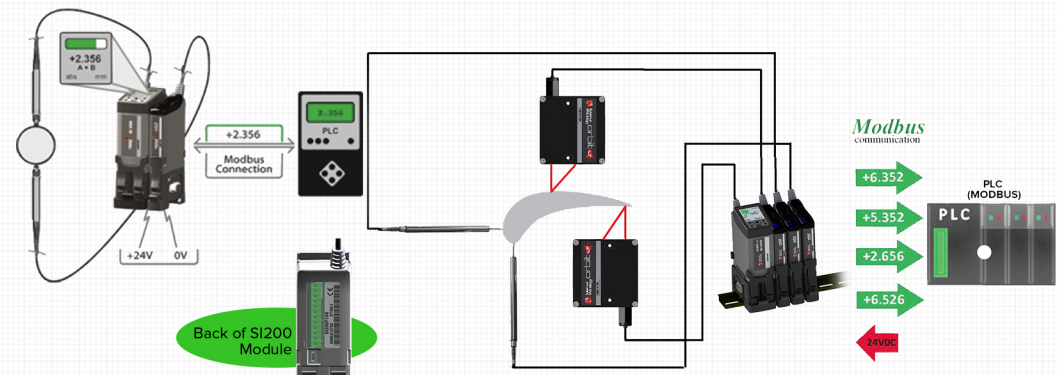
				
<b>MODIM Interface</b>	<b>Ethernet Interface</b>	<b>RS232 Interface</b>	<b>USB Interface</b>	<b>Wireless Interface</b>
• For Modbus PLC	• Ethernet TCP/IP	• Up to 150 sensors	• Dynamic modes available	• Connect Orbit® 3 stack to PC via Bluetooth®

### Input Modules

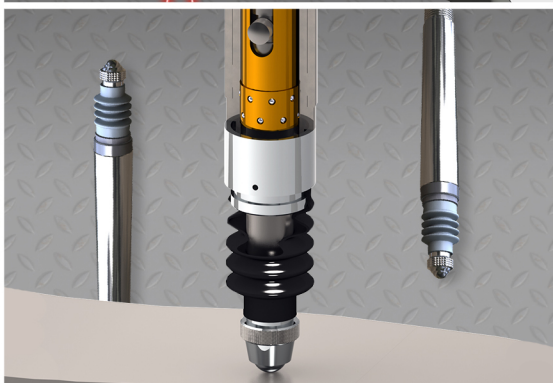
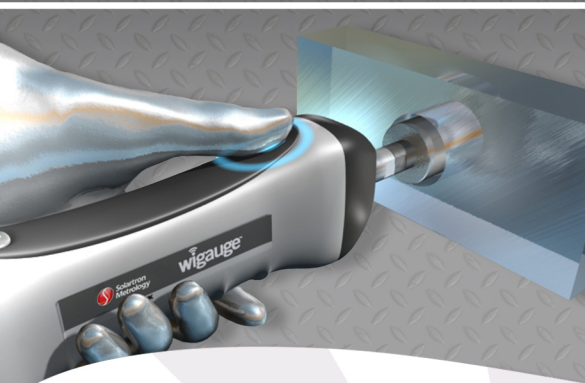
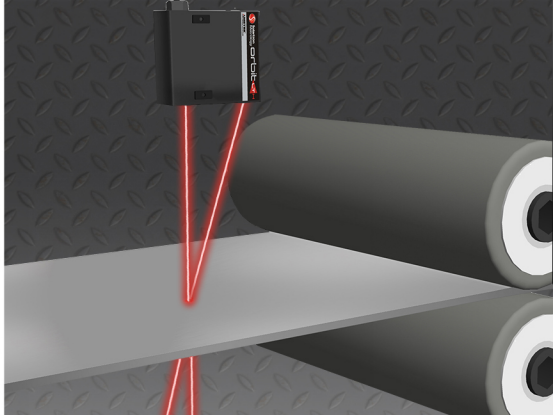
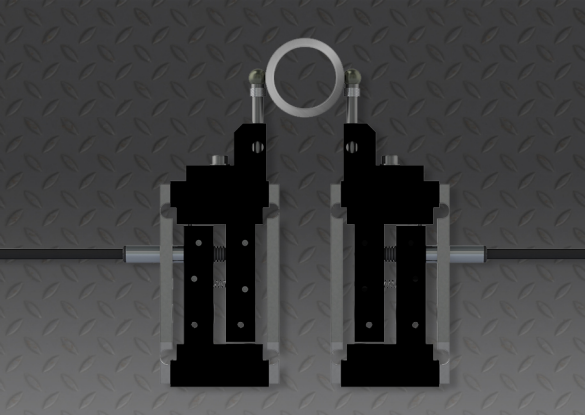
			
<b>Encoder Input</b>	<b>Analogue Input</b>	<b>Digital Input/Output</b>	<b>Digimatic Input</b>
• For TTL, incremental	• For DC or 4-20 mA	• 8 pins I/O into PLC	• Compatible to Digimatic Instruments

## 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







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