

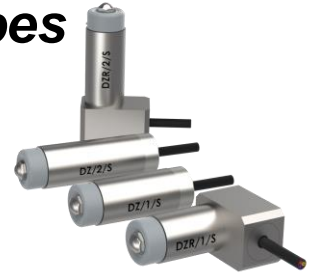


## Application Story

### Check tight spaces with compact probes

#### The Challenge

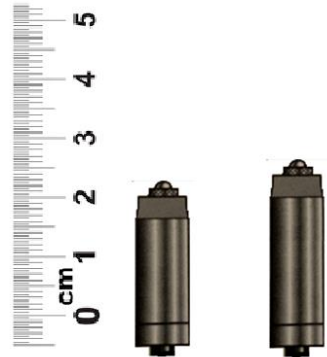
Certain dimensions in automotive and aerospace parts may require multiple points to be checked, but in spaces where standard gauging probes would be too long to fit into. Examples might be checking multiple inner diameters of a transmission housing, or perhaps taper measurements. For this, you need shorter sensors that are still accurate and repeatable for gauging.



DZ Probes are available in 1 and 2mm ranges, with straight and R/A outlets

#### The Solution

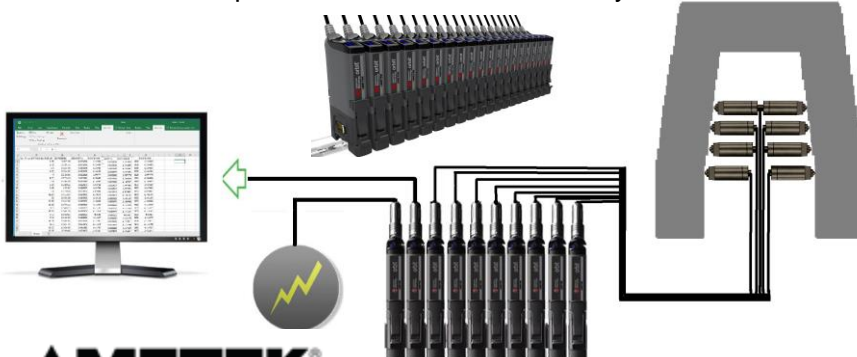
Solartron Metrology DZ probes are some of the shortest 1mm and 2mm gauging probes on the market. The unique bearing design creates a probe body that is up to 50% shorter than standard LVDT sensors. Both straight and R/A outlets are available.



- **Ultra High Accuracy, Resolution and Repeatability:** Solartron DZ sensors have accuracy and resolution as high as **0.15 µm** and repeatability as high as **0.05 µm**.
- **Digitally Calibrated:** Solartron DZ probes are calibrated with a laser interferometer at the UK factory, ensuring performance that surpasses standard gauging probes.
- **Lower costs:** DZ probes can be set up quickly and easily for gauging in tight spaces. This means faster, repeatable measurements with minimal downtime that will provide long term cost savings.
- **Robust Network:** Up to 200 Sensors - Contact, Non Contact, and 3<sup>rd</sup> party - can easily be connected via the Solartron Orbit® Network
  - Output to PC via USB, Ethernet TCP/IP, or PLC via Ethernet/IP®, Profinet®, EtherCAT®, Modbus TCP/IP or Modbus (serial). CC Link coming soon.
  - Output Data to Excel Sheets or any SPC software



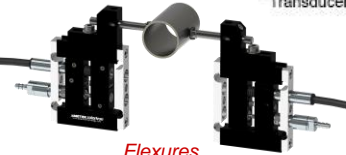
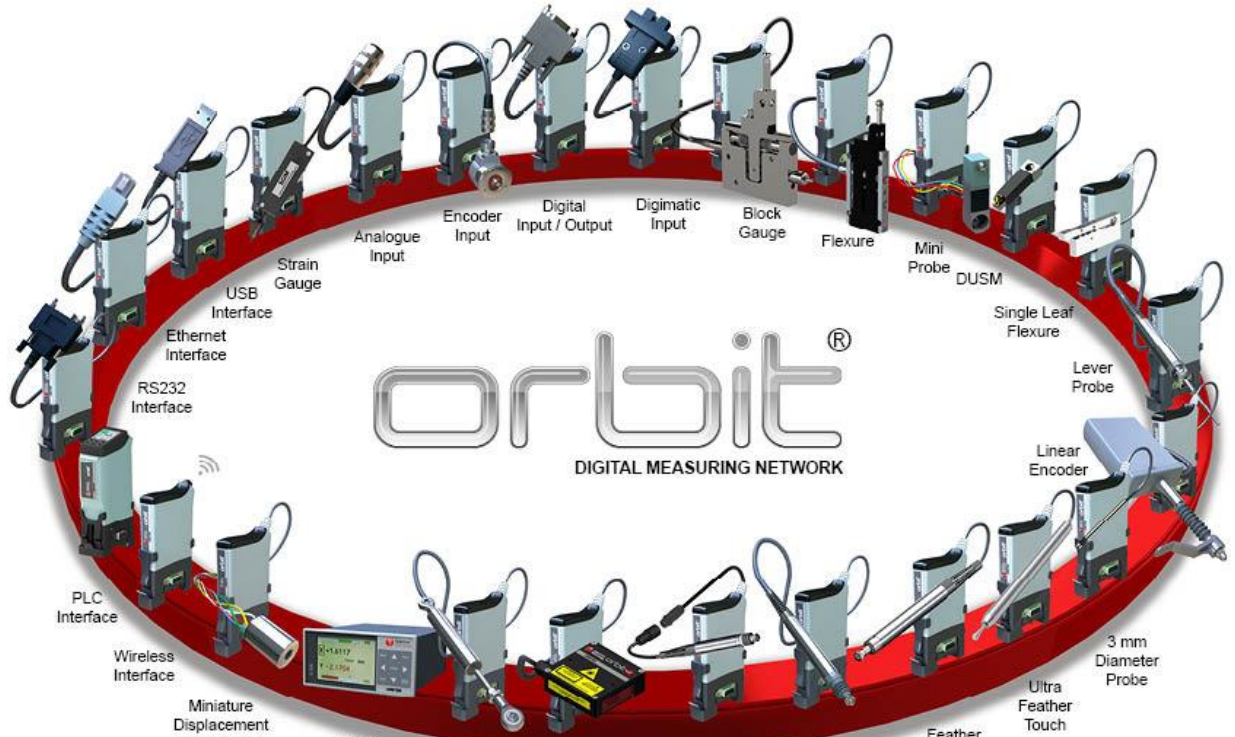
DZ Probes being used to check runout. Photo courtesy of VGage Gauging Systems ([www.vgage.com](http://www.vgage.com))



DZ Probes checking two different IDs in an automotive transmission housing. Photo courtesy of VGage.

## Orbit® – The Total Measurement System from Solartron Metrology

The Solartron Orbit® Digital Measurement System, provides a limitless set of measuring system solutions, with numerous different interfaces to computers and PLC's.



*Flexures*



*Block Gauges*



*Displacement*

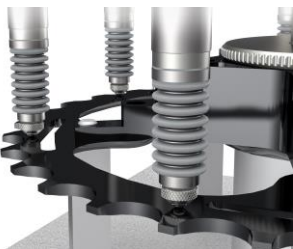


*Multi Channel Wireless Gauge*



*Bore Gauging*

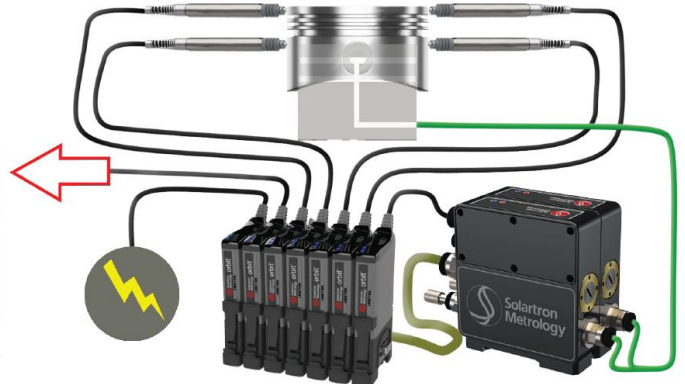
*G-Type (With signal conditioning mounted at the end)*



*Gauging Flatness of a Bicycle Gear*



*Orbit GCS Software*



*Measurement of Piston with Air Gauging checking ID, and connected to Orbit with the Air Gauge Module. OD Checked with Digital Probes.*