Materials testing and data logging using Linear Encoder
The Product

Solartron Metrology’s Linear Encoders are highly accurate optical gauges designed for use in applications where consistent sub-micron measurement is required. Accuracy is maintained along the entire measurement range. The Linear Encoders are available with both the iBox for TTL output and Orbit® 3 Compatibility.

Range: 12 or 25 mm
Accuracy: Up to 0.4 µm
Repeatability: Up to 0.1 µm
Resolution: Up to 0.05 µm

The Challenge

Data logging and processing systems and/or equipment can be used to provide information about the properties of materials under high thermal and mechanical stress, for use in power generation applications and facilities.

Systems created can contain a variety of probes including Linear Encoders to take temperature measurements and analysing application-specific functions, which need to be combined into a central logging system to provide valuable data.

The Solution

Solartron Metrology’s Linear Encoder’s alongside Analogue Input Modules (AIM) can be used to gain temperature measurements. This, integrated with process control software to provide real-time monitoring and secure long-term data capture, provides the basis for taking data. Incorporating the Orbit® 3 Network, probes and systems can effectively talk to one another, providing the end user with consolidated data. The features of Solartron’s Orbit® 3 digital network that permit integration of different sensor input types on one platform means that a high number of components from a single source can be found. Mechanical reliability, accuracy and secure data recording are key features of Solartron products.