

# No Error Temperature Measurement System

**Fact: All thermocouples, resistance thermometer sensors and associated indicators have errors.**

At 100 °C typical error, within Class 1 tolerance, K, N, J thermocouples, to BSEN60584-2 and 4 wire resistance thermometers to BSEN60751 is  $\pm 1.5^{\circ}\text{C}$ .

At 600 °C type K, N, and J thermocouples could have  $\pm 2.4^{\circ}\text{C}$  error and 4 wire resistance thermometers could have  $\pm 3.3^{\circ}\text{C}$  error and still be in tolerance.

Add to this that you also have to compensate for the errors from the electrical indicator.

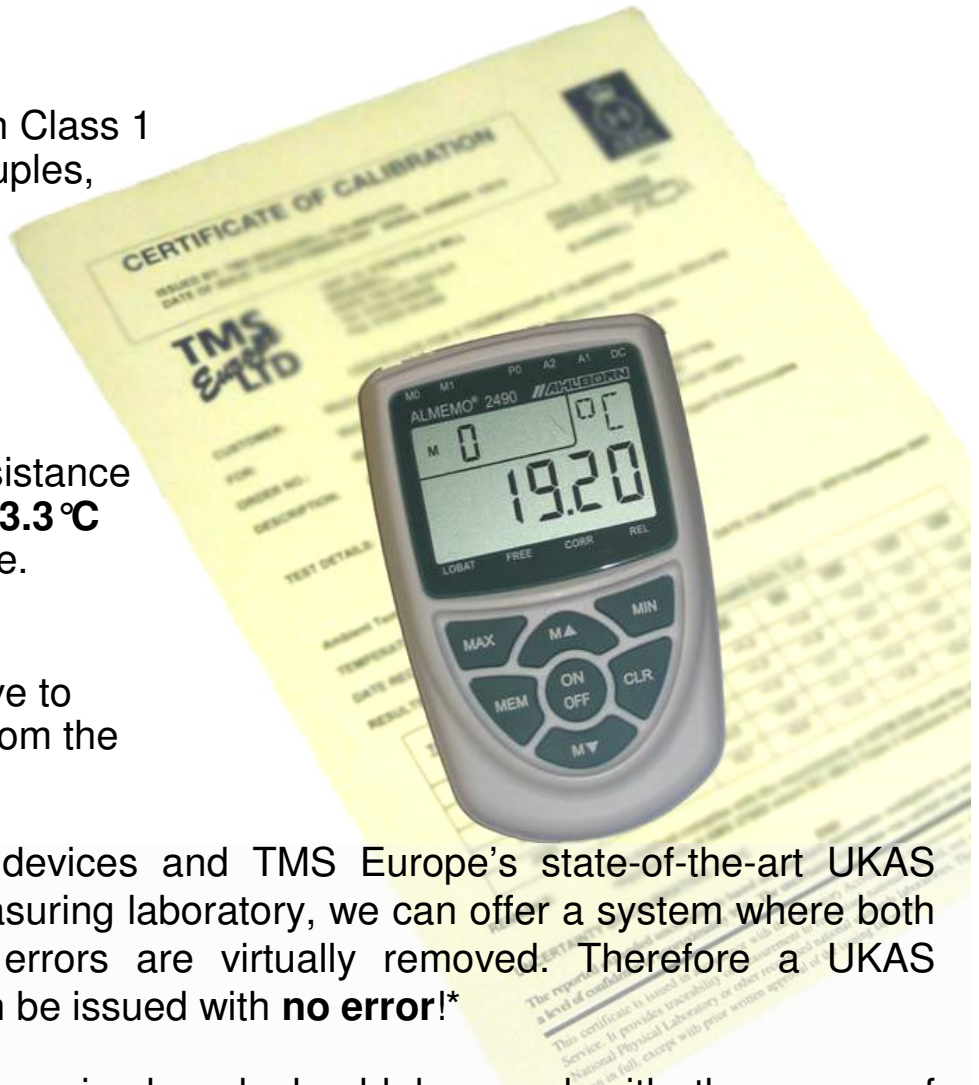
Using patented **Almemo**® devices and TMS Europe's state-of-the-art UKAS accredited temperature measuring laboratory, we can offer a system where both the indicator and sensor errors are virtually removed. Therefore a UKAS Certificate of Calibration can be issued with **no error!**\*

The units are competitively priced and should be used with the range of interchangeable calibrated sensors that use **Almemo**® connectors. These advanced connectors hold the calibration information to remove any sensor errors in order to give **No Error Temperature Measurement**\*.

*\* Instrument error better than 25 milliKelvin depending on sensor type, typical system error (i.e. instrument & sensor) would be 50 milliKelvin  $\pm$  LSD (Least Significant Digit).*



TMS Europe Ltd,  
Unit 10, Stretfield Mill, Bradwell,  
Hope Valley, S33 9JT  
Tel: 01433 620535  
Fax: 01433 621492  
Email: sales@tmseurope.co.uk  
Web: www.tmseurope.co.uk



# ALMEMO® PRECISION THERMOMETERS – UKAS CALIBRATED

## **2450-1L 1 Almemo input socket ~ £218.00**

4 channels per connector e.g.;

Thermocouples (K,N,J,T, R)  
Rh,Temp(Thermistor), Dewpoint, Mixture.  
No Resistance Thermometer range  
Rotational Speed  
Voltage  
Current

System accuracy: Resolution 0.1  
 $\pm 0.1\%$  of measured value  $\pm 3$  LSD

Instrument Calibration: 6 point UKAS calibration of 1 temperature range.  
Optionally £50.00 extra for each additional range.

## **2490-1L 1 Almemo input socket ~ £279.00**

4 channels per connector e.g.;

Thermocouples (K,N,J,T,S,R,B)  
Rh,Temp(RTD), Dewpoint, Mixture.  
Resistance Thermometers (up to 4-wire)  
Rotational Speed  
Voltage  
Current

System accuracy: Resolution 0.01  
 $\pm 0.03\%$  of measured value  $\pm 3$  LSD

Instrument Calibration: 6 point UKAS calibration of 1 temperature range.  
Optionally £50.00 extra for each additional range.

## **2490-2L 2 Almemo input sockets ~ £345.00**

4 channels per connector e.g.;

Thermocouples (K,N,J,T,S,R,B)  
Rh,Temp(RTD), Dewpoint, Mixture.  
Resistance Thermometers (up to 4-wire)  
Rotational Speed  
Voltage  
Current

System accuracy: Resolution 0.01  
 $\pm 0.03\%$  of measured value  $\pm 3$  LSD

Instrument Calibration: 6 point UKAS calibration of 1 temperature range.  
Optionally £50.00 extra for each additional range.

A full range of Almemo® devices, including Data Loggers and Data Acquisition Systems can found at: [www.tmseurope.co.uk/ahlborn](http://www.tmseurope.co.uk/ahlborn).

For sales information call us on 01433 620535 or email [sales@tmseurope.co.uk](mailto:sales@tmseurope.co.uk).  
For technical or calibration queries call us or email [lab@tmseurope.co.uk](mailto:lab@tmseurope.co.uk).