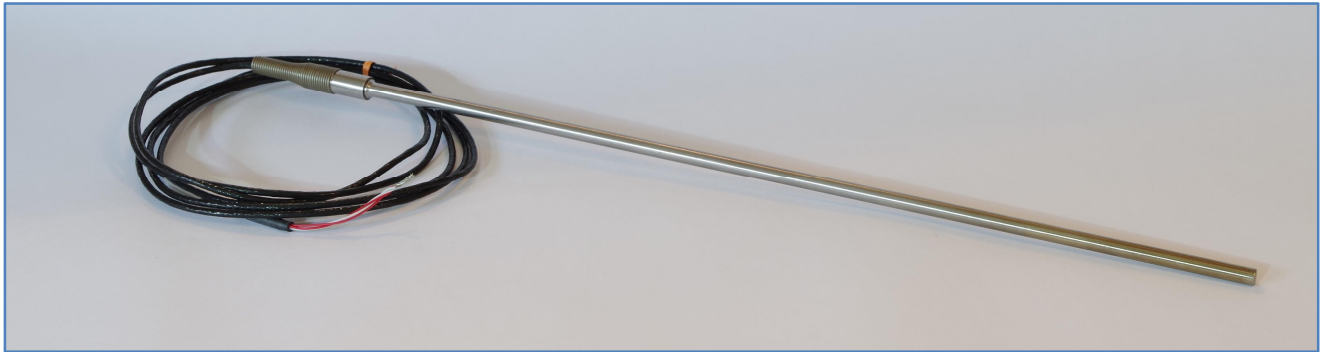


# ULTAS 450



Property	ULTAS 450 Specification
<b>Description</b>	A reference platinum resistance thermometer for accurate measurements such as when calibrating other thermometers against it by comparison.
<b>Range</b>	-100 °C to 450°C.
<b>Accuracy</b>	± 0.005 °C or better is possible.
<b>Stability</b>	± 0.010 °C or better at 0°C per annum but dependent upon use.
<b>Sensor type</b>	Precision wire wound sensor. BS EN 60751 Class A. 100Ω at 0 °C. 4-wire connected.
<b>Hysteresis</b>	± 0.010 °C or better at 0°C.
<b>Self-heating</b>	≤ 0.010 °C at 0°C for a 1 mA current.
<b>Dimensions</b>	6mm diameter and 350mm long to the cable transition point.
<b>Sheath material</b>	316 stainless steel.
<b>Cable</b>	4-wire, screened PTFE insulation. 2 m long or as required. Range -50 °C to 200 °C.
<b>Cable termination</b>	Bare wire termination or a connector to the customer's requirement by discussion.
<b>Markings</b>	Unique serial number etched onto the sheath and on the end of the cable.
<b>Testing and guarantee.</b>	Each thermometer is temperature cycled to ensure it is stable and issued with a certificate of conformity showing its resistance at 0 °C.  Benrhos has a no-quibble replacement policy for the first 12 months.
<b>Similar thermometers</b>	Isotech 935-14-16. Fluke 5615-6. ASL T100-450-1.
<b>UKAS calibration</b>	Available from Benrhos via an independent UKAS laboratory.
<b>Notes</b>	<ol style="list-style-type: none"><li>i. A ULTAS 450 reference platinum resistance thermometer with a UKAS calibration is available as an audit item and for customers to assess at a nominal charge.</li><li>ii. A carrying case is also available.</li><li>iii. The Benrhos Izero+ ice point bath (0 °C ±0.010°C) is a convenient means of checking thermometers and referencing thermocouples.</li></ol>

