

## Ultra Cold Temperature Sensor (UCTxx)



Suitable for temperatures as low as  $-200^{\circ}\text{C}$  ( $-328^{\circ}\text{F}$ ). Ideal for monitoring vaccines and medical products based on mRNA technology that require ultra cold storage. The sensor uses a platinum probe that varies in resistance with temperature changes.

The sensor has good stability with immunity to electrical noise making it also suitable for use in industrial environments as well as medical applications.

<b>Temperature</b>	
<b>Measurement Range</b>	$-200^{\circ}\text{C}$ to $+150^{\circ}\text{C}$ $-328^{\circ}\text{F}$ to $+302^{\circ}\text{F}$
<b>Measurement Resolution</b>	0.1 $^{\circ}\text{C}$ increments 0.2 $^{\circ}\text{F}$ increments
<b>Measurement Accuracy</b>	Typical : * $\pm 0.15^{\circ}\text{C}$ * $\pm 0.3^{\circ}\text{F}$
<b>Interface</b>	
<b>Communications cable</b>	RJ-45 jack to sensor using UTP CAT5e/6 cable
<b>Power source</b>	Powered by the sensorProbe+ family units. No additional power needed
<b>Maximum Cable Length</b>	The UCTS sensor can be extended from the RJ-45 Intelligent Sensor ports on the base units up to 60 feet, or 18 meters using standard CAT5/6 LAN cable
<b>Dimension</b>	75 x 55 x 27 mm
<b>Components</b>	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
<b>Operating Environment</b>	Temperature : Min. $-35^{\circ}\text{C}$ – Max. $80^{\circ}\text{C}$ Humidity: Min. 20% – Max. 80% (Non-Condensing)
<b>Sensor count</b>	1
<b>Important Note</b>	Compatible only with sensorProbe+ platform

**UCTxx - Technical Drawing**

