

The Yocto-PT100 is a USB temperature sensor. This is the most accurate USB temperature measurement device that we offer. The module uses an external PT100 probe (not included) to make instant temperature measurements, and can also record measures on a built-in flash memory to read them later on through USB. A PT100 probe is used to measure the temperature at any specific place, including in a liquid, with a very high stability and a high accuracy (sensitivity up to 0.01°C and accuracy up to 0.03°C at 0°C when using a PT100 conforming to IEC 60751 DIN 1/10 B standard). It is particularly well suited for applications such as laboratory measurements, etc.

The Yocto-PT100 can be used with PT100 probes using 2, 3 or 4 wires. The type of connection is setup in software. To reach the highest accuracy, a 4-wire probe should be used. 3-wire probes are reasonably accurate and not too much affected by wire lengths, contrarily to 2-wire probes which are the least accurate and very sensitive to wire length.

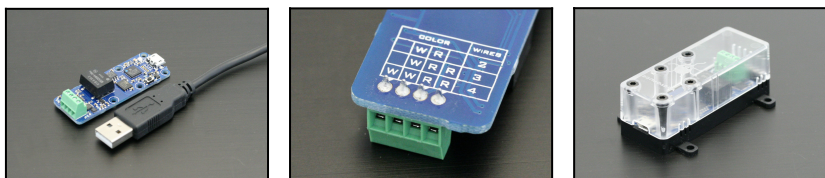
The Yocto-PT100 features a built-in galvanic insulation between the USB control part and the PT100 measure circuit. It is therefore possible to use non-insulated PT100 probes, which are often more reactive and less expensive,

Given the number of variants of PT100 probes and their prices, the Yocto-PT100 does not include any probe. The probe must be purchased separately at a specialized shop.

Specifications

Product ID	PT100MK1
USB connector	micro-B
Thickness	10.1 mm
Width	20 mm
Length	55 mm
Weight	7 g
Channels	1
Refresh rate	15 Hz
Measuring range (T)	-200...325 °C
Accuracy	0.03 °C
Sensitivity	0.01 °C
IEC protection class	class III
USB insulation, dielectric strength (1 min.)	1.5 kV
Normal operating temperature	5...40 °C
Extended operating temperature [‡]	-30...85 °C
RoHS compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x0035
Suggested enclosure	YoctoBox-Long-Thick-Black
Harmonized tariff code	8542.3190
Made in	Switzerland

[‡] The extended temperature range is defined based on components specifications and has been tested during a limited duration (1h). When using the device in harsh environments for a long period of time, we strongly advise to run extensive tests before going to production.



For more information: www.yoctopuce.com/EN/products/yocto-pt100