

The Yocto-Bridge is a precision ratiometric analog/digital converter to measure over USB the very weak voltage produced by a load cell, as used in weighing scales, or any other type of strain sensor, or other sensor with a Wheatstone bridge output.

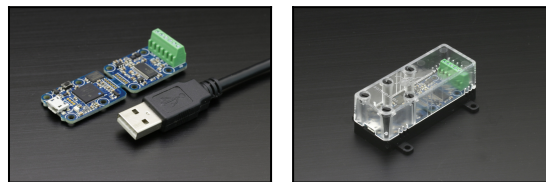
The measure is performed by a 32 bit A/D with built-in preamplifier and FIR filter, which allows for a sensitivity of a few nV/V. The device includes a built-in temperature sensor, which can be internal or external NTC, to cancel temperature drift inherent to load cells, both in offset and span. The Yocto-Bridge can also apply AC excitation to cancel thermocouple effects, and perform zero tracking for simple applications where the measured signal frequently comes back to zero.

This version includes a single ratiometric input. If you intend to build a weighing scale with four load cells, you can use the Yocto-MaxiBridge instead, which includes four ratiometric inputs.

Specifications

Product ID	YWBRIDG1
USB connector	micro-B
Width	20 mm
Length	60 mm
Weight	7 g
Channels	1
Chipset	Texas ADS1263
Refresh rate	2 or 7 Hz
Accuracy (typ.)	10 nV/V
Excitation voltage	4.7 V AC/DC
IEC protection class	class III
Normal operating temperature	5...40 °C
Extended operating temperature [‡]	-30...85 °C
RoHS	Yes
USB Vendor ID	0x24E0
USB Device ID	0x0076
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-bridge