

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

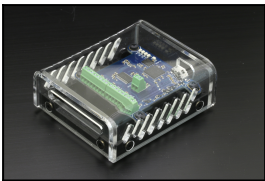
The measure is performed by a 32 bit A/D with built-in preamplifier and FIR filter, which allows for a sensitivity of a few nV/V. The device includes a built-in temperature sensor, which can be internal or external NTC, to cancel temperature drift inherent to load cells, both in offset and span. The Yocto-MaxiBridge 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 four ratiometric inputs, which are measured in round-robin loop, to let you easily build a weighing scale with 3 or 4 load cells. If you only need one ratiometric input, you can use the Yocto-Bridge, which is smaller and less expensive.

Specifications

Product ID	YWMBRDG1
USB connector	micro-B
Width	58.3 mm
Length	50 mm
Weight	15 g
Channels	4
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 compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x007F
Suggested enclosure	YoctoBox-MaxiIO-Transp
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-maxibridge