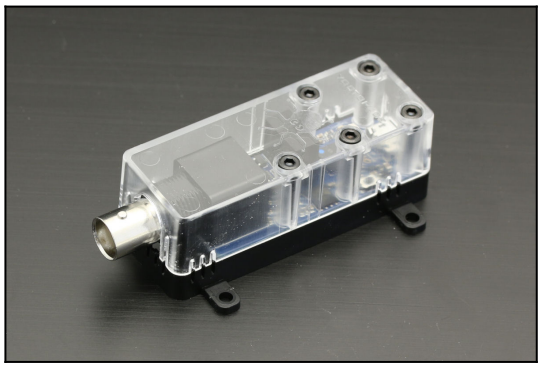
Yocto-milliVolt-Rx-BNC



The Yocto-milliVolt-Rx-BNC device is a high accuracy USB voltmeter. It lets you measure by USB very small voltages (down to a few dozens of microVolts, and up to 2V max), even when they are generated by extremely weak sources (very high impedance). The BNC connector makes it possible to bring the signal using a shielded coaxial cable.

Typical applications include measurement of electro-chemical reactions (e.g. pH and redox probes), low-voltage sensors (e.g. gaz sensors, etc), or Wheatstone bridges (e.g. load cells, etc). It is also possible to use this device to accurately measure the voltage drop across a shunt to measure high currents.

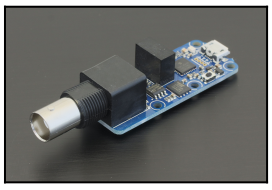
The input circuit of this device uses a very low bias current amplifier (typ. 0.2 pA). The measure circuit is electrically insulated from the USB bus, which makes it possible to measure grounded voltages without risk of creating a ground loop.

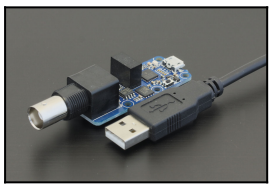
For measuring less sensitive signals, you can use the variant of this product that has a rising cage connector, and which is significantly shorter.

Specifications

Product ID	RXMVOLT2
USB connector	micro-B
Width	20 mm
Length	72.5 mm
Weight	16 g
Channels	1
Input bias current (typ.)	<> 1 pA
Refresh rate	100 Hz
Input impedance	1000 GΩ
Measuring range	-1000 ... +2000 mV
Accuracy	0.1 %
Sensitivity	0.01 mV
IEC protection class	class III
USB insulation, dielectric strength (1 min.)	1 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	0x0042
Suggested enclosure	YoctoBox-Long-Thick-Black-BNC
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-millivolt-rx-bnc