Yocto-Amp

This device is a digital USB ammeter that allows you to measure current automatically. It can provide quite accurate digital measures (2 mA, 1%). It works with direct current (DC) as well as alternating current (AC) for which it provides the RMS value (5 mA or 3%).

This device is insulated, which means that the sensor part is electrically disconnected from the USB part: you can measure any current including one coming from the mains, without risk of frying your computer.
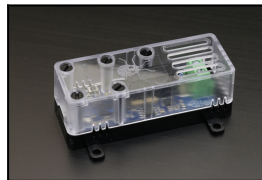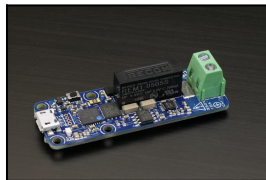
The module provides immediate reading on USB, and can also store measures on the device internal flash for later retrieval when connected again by USB.

Electrical Sensors

Specifications

Product ID	YAMPMK01
Hardware release[†]	Rev. C
USB connector	micro-B
Width	20 mm
Length	56 mm
Weight	10 g
Max Current (continuous)	10 A DC/rms
Max Current (peak)	17 A DC/rms
Refresh rate	10 Hz
Input impedance	5 mΩ
Max working voltage	250 V r.m.s.
Accuracy (AC, 50Hz/60Hz)	3 mA, 1 %
Accuracy (DC)	2 mA, 1 %
Sensitivity	2 mA, 0.3%
Measurement category	Cat II
IEC protection class	class II
USB insulation, clearance dist.	3 mm
USB insulation, creepage dist.	3 / 6 mm
USB insulation, dielectric strength (1 min.)	3 kV r.m.s.
Normal operating temperature	5...40 °C
Extended operating temperature[‡]	-30...85 °C
Power derating	0.5A/°C above 67°C
RoHS compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x001F
Suggested enclosure	YoctoBox-Long-Thick-Black-Vents
Harmonized tariff code	8542.3190
Made in	Switzerland

[†] These specifications are for the current hardware revision. Specifications for earlier revisions may differ.

[‡] 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-amp