

100A (30A) DC Current probe 1W-UNI

A 0-100A (0-30A) sensor for direct DC current measurement

100A (30A) DC Current probe 1W-UNI can measure DC current of up to 100A (30A) using a shunt. The shunt is connected directly into the measured circuit. The sensor is suitable for monitoring the power input of Telco cabinets or BTS stations, or for monitoring battery charging.

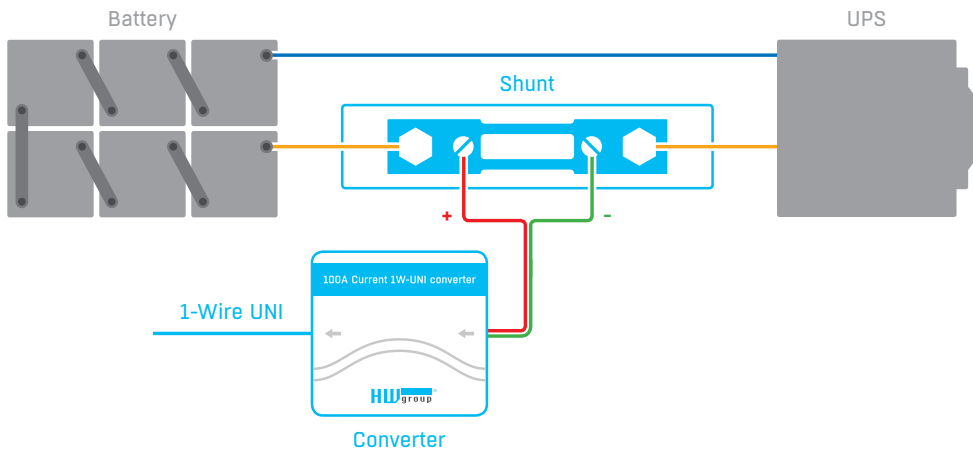
Together with a Poseidon2 or HWg-Ares unit, it can serve as an early warning system in case of overload or current direction change (charge/discharge). 100A (30A) DC Current probe 1W-UNI consists of a shunt and a 1-Wire converter.

The sensor is suitable for electrical current monitoring in 12V / 24V or -48V DC powered systems. Together with a Poseidon2 or Ares units, it is suitable for detecting overcurrent or monitoring current direction for example in:

- High-capacity UPS's
- Telco devices
- Railway applications



Usage



- The shunt is connected into the path of the monitored current, regardless of polarity.
- The “+” pole of the converter corresponds to the more positive voltage (e.g. the power source side). The converter indicates a positive value when the current flows from the positive pole to the negative one. The reverse direction is indicated by a negative value (battery charging “+”, discharging “-”).
- The shunt is connected to the 1-Wire UNI converter with a 1m two-wire cable. This length is fixed.
- For higher accuracy, the shunt and the 1-Wire UNI converter are matched and cannot be freely exchanged.

Basic features

DC Current probe 1W-UNI	100A	30A
Current range	0-100 A DC	0-30 A DC
Shunt resistance/voltage drop at max. current	0,6 mOhm / 60 mV	2 mOhm / 60 mV
Measurement accuracy	2%	
Resolution	0,1A	
Electrical isolation	The 1-Wire UNI bus is electrically isolated from the measured circuit	
Measured voltage	Max. 60V	
Cable length between the shunt and the converter	1m	
Power	Bus-powered (1-Wire UNI) – max. 2 sensors per active port	
Interface	2x 1W-UNI for daisy-chaining	
Connection	Poseidon2 and Ares devices	
Environment	Indoor use	

Related and similar products

Name	Description
100A DC Current probe 1W-UNI	0 to 100 A DC Current Probe for the 1-Wire UNI bus. All Poseidon2 and Ares models, Poseidon 4002 and 2250.
30A DC Current probe 1W-UNI	0 to 30 A DC Current Probe for the 1-Wire UNI bus. All Poseidon2 and Ares models, Poseidon 4002 and 2250.
Sensor 0-20mA 1W-UNI	4 to 20 mA DC Current Probe for the 1-Wire UNI bus. All Poseidon2 and Ares models, Poseidon 4002 and 2250.
Sensor 4-20mA 1W-UNI	0 to 20 mA DC Current Probe for the 1-Wire UNI bus. All Poseidon2 and Ares models, Poseidon 4002 and 2250.
30A Current probe 1W-UNI	0 to 30 A AC Current Probe for the 1-Wire UNI bus. All Poseidon2 and Ares models, Poseidon 4002 and 2250.
Sensor 60V 1W-UNI	0 to 60 V (-48 V) Voltage Probe for the 1-Wire UNI bus. All Poseidon2 and Ares models, Poseidon 4002 and 2250.
Sensor 230V AC 1W-UNI	100 to 250 V AC Voltage Probe for the 1-Wire UNI bus. All Poseidon2 and Ares models, Poseidon 4002 and 2250.
Power Egg2	110 to 230 V AC voltage detector and control for DI. All models Poseidon2, Damocles2, Damocles, Ares and STE2.
Power Detector 110 / 230 V	110 to 230 V AC voltage detector for DI. All models Poseidon2, Damocles2, Damocles, Ares and STE2.

Package contents

A complete shipment contains the following items:

- measuring shunt
- 1-Wire UNI converter
- printed manual