

# 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.*

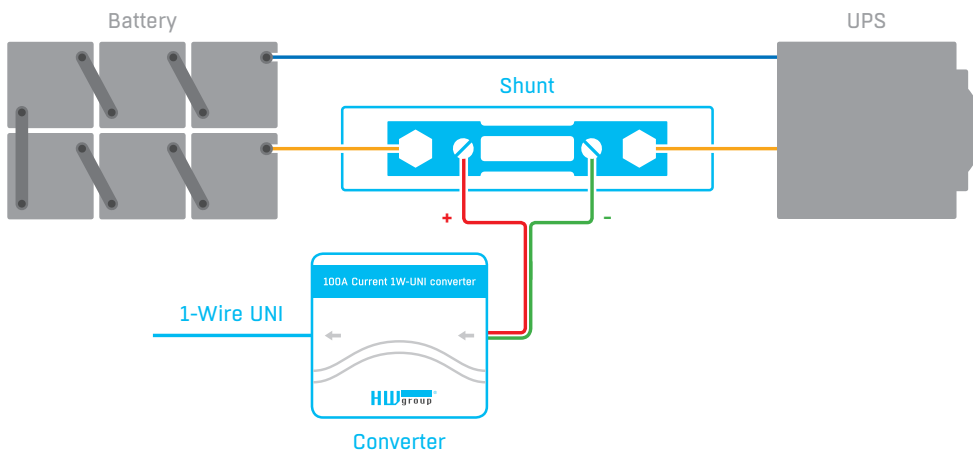
Together with a Poseidon2 or HWg-Ares unit, it can serve as an early warning system in case of overload or current direction change (charge/discharge). 100A (30A) DC Current probe 1W-UNI consists of a shunt and a 1-Wire converter.

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