Sensor 0-20mA 1W-UNI

Electrically isolated current sensor, 1Wire-UNI output

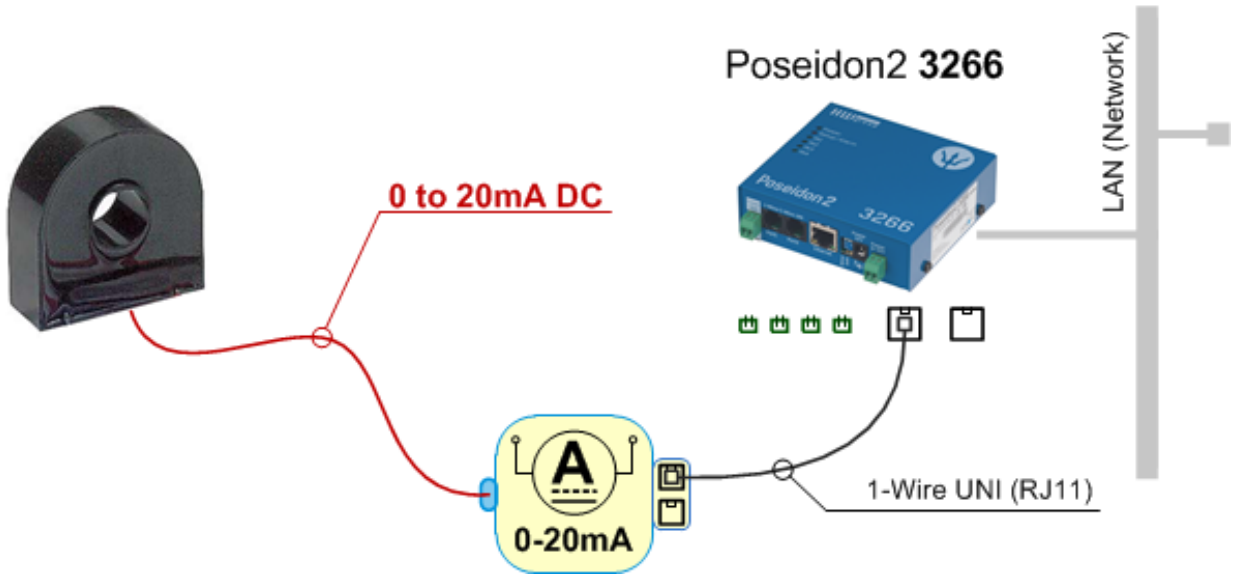
Signal converter to measure 0-20 mA from an external current source. 1-Wire UNI bus (RJ11) output. The input is electrically isolated from the output 1Wire-UNI bus.

Connect an external industrial probe with a 0-20mA output (“source” type). For example, the output of a current transformer.
Almost any industrial sensor can be connected to Poseidon2 or Ares units in this way. The values can be shared over LAN or GSM.

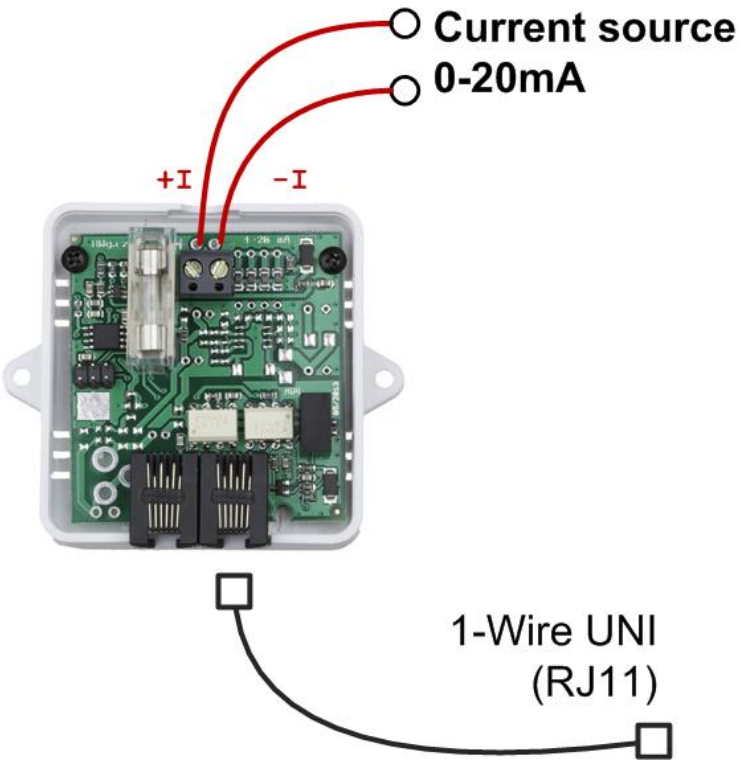
- Powered from the 1-Wire UNI bus (RJ11)
- Electrically isolated 0-20mA current input

Applications

- Current measurement with industrial probes
- Connecting electronic scales
- Connecting pressure transducers or other industrial sensors

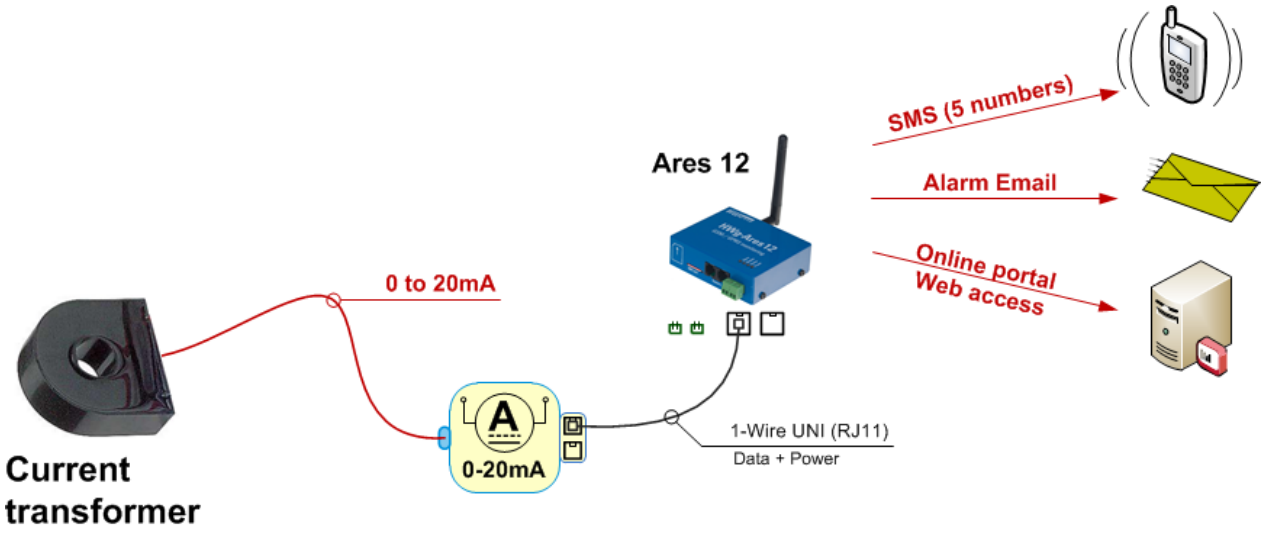


Basic features



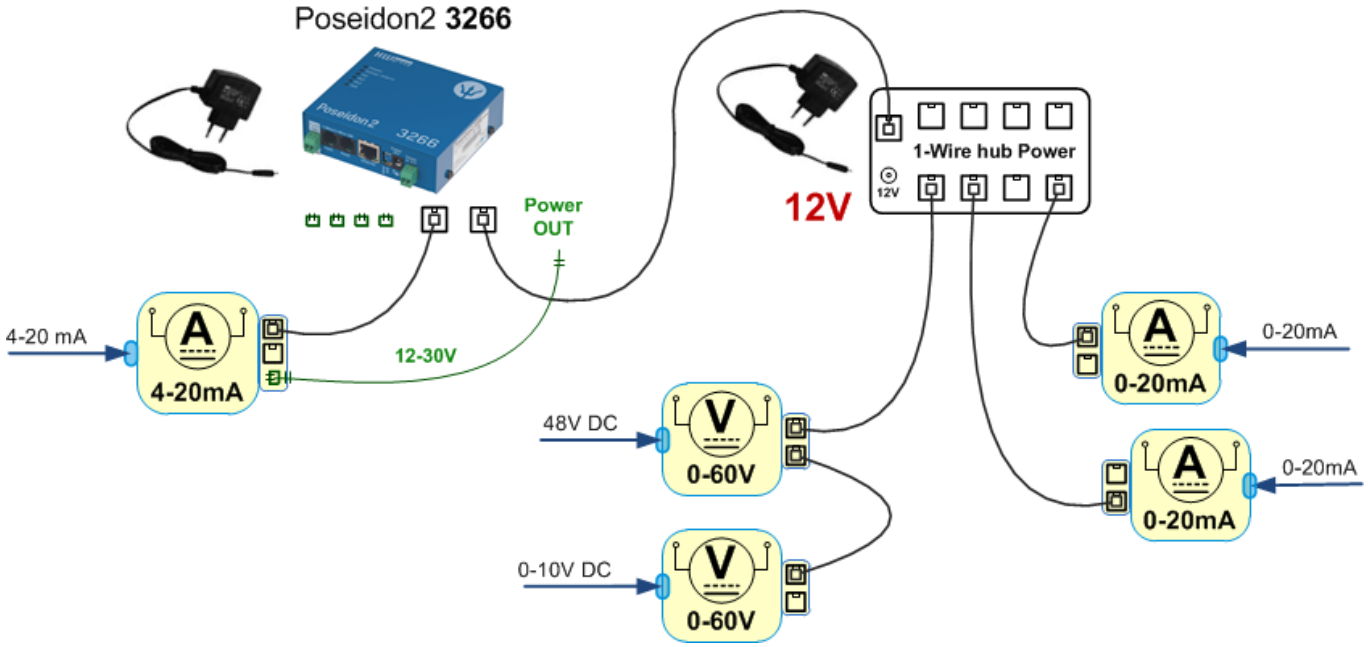
Bus	
Type	1Wire-UNI (RJ11)
Connects to	Poseidon2 xxxx, Ares xx, Poseidon 2250, Poseidon 4002, SiteMon5
Connector	2x RJ11 (sensors can be daisy-chained)
Maximum distance	60m (total line length from the active port)
Electrical isolation	1Wire-UNI bus is electrically isolated from the 0-20mA input
Power	
Power supply	1Wire-UNI bus
Power limits	One active RJ11 port can power at most two sensors. To boost the power, use our “1-Wire hub Power”.
Electrical isolation	0-20mA input electrically isolated from the 1Wire-UNI (RJ11)
Sensor input	
Connector	2-pin terminal block (I+ , I-)
Supported sensors	External current-sourcing probe, “0-20mA DC (source)” type
Input range	0-20 mA (max. 30V)
Input protection	Protective fuse (fast) - 63 mA
Accuracy	2% of the full 20mA range / 25°C
Sensor output	
Resolution	1 decimal place
Displayed units	Default: [mA] If you need a conversion (e.g. to [m], [mm], [hPa], [ppm]), contact your distributor.
Measuring period	Once per second
Miscellaneous	
Operating conditions	-40 to +85 °C (-40 to +185 °F) / 5 to 70% RH
Dimensions / mass	65 x 80 x 30 [mm] / 200 g

Remote sensor monitoring over GSM/GPRS – Ares 12



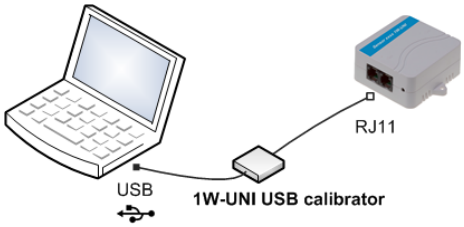
- The Ares GSM/GPRS unit powers the current sensor and reads data.
- Internal Ares battery provides back-up power to the sensor.

Several sensors on a single bus



- Sensors are electrically isolated from the input voltage/current.
  One active port can power at most two sensors.
- To branch the 1-Wire UNI bus and boost the power over RJ11, we recommend our "**1-Wire hub Power**".
- The "**1-Wire hub Power**" requires a power source.

Conversion and calibration settings



- Calibration tool for MS Windows
- Sensor can be calibrated on a curve at 8 different points.
- The program can set a conversion from the input voltage [V] to an output unit, e.g. [mm], [hPa], [m] or [ppm].
- Conversion directly in the sensor gives the advantage of displaying the correct value in e-mails, text messages or the WEB interface.

Please contact your distributor for more information.

Related products	
Sensor 4-20mA 1W-UNI	4-20mA current loop sensor, powers an external “4-20mA sink” sensor.
Sensor 0-20mA 1W-UNI	0-20mA sensor for the 1Wire UNI bus.
Sensor 60V 1W-UNI v2	0-60VDC (–48V) voltage sensor, 1Wire UNI bus.
Converter 2xPt100 1W-UNI	Converter to connect one or two external Pt-100/1000 probes to the 1-Wire UNI bus.
30A Current probe 1W-UNI	0-30AAC sensor, 1Wire UNI bus, with a clamp-on transformer.
1W-UNI USB calibrator	USB–RJ11 cable + software to calibrate and configure 1-Wire UNI sensors.
1-Wire hub Power	Hub for 1 to 8 sensors (8x RJ11), power-boosted from an external adapter.