

Sensor 60V 1W-UNI v2

Electrically isolated DC voltage sensor, 1Wire-UNI output

Signal converter for DC voltage measurement (up to 60V DC) with conversion to the 1-Wire UNI bus (RJ11). Typically used as a power or battery voltage sensor in telco applications (-48V standard).

It is also useful for voltage sensing at the output of 0-10V industrial transducers.

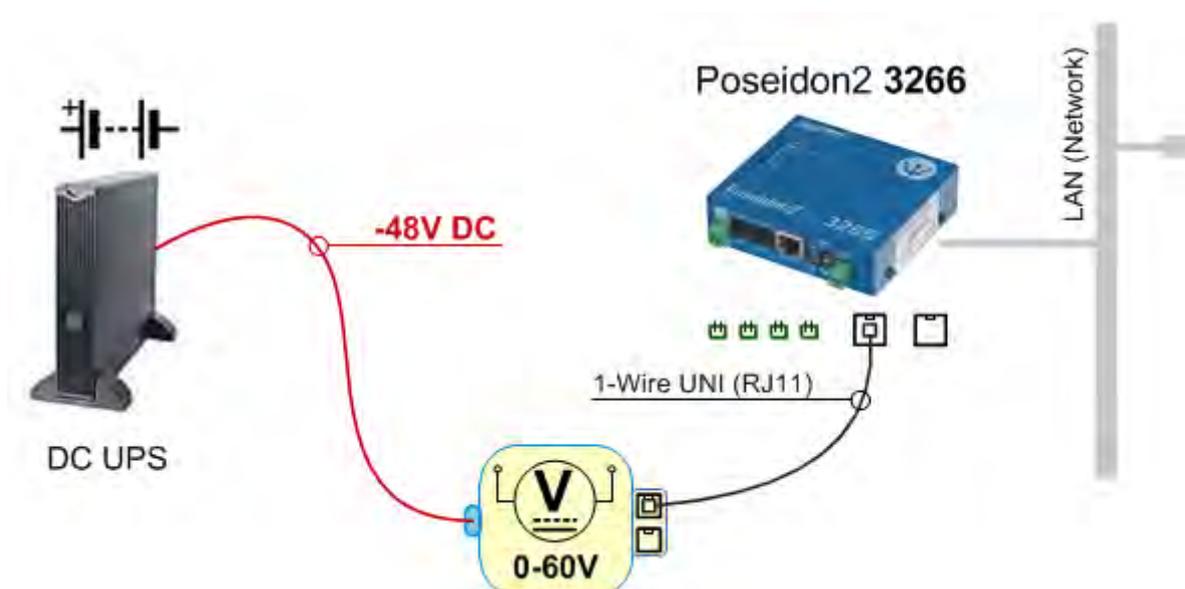
Almost any industrial sensor can be connected to Poseidon2 or Ares units in this way. The values can be shared over LAN or GSM.

- Electrical isolation
- High accuracy (can be used for 0–10V, too)
- Sensors can be daisy-chained (two RJ11 connectors)
- Powered from the 1-Wire UNI bus (RJ11) or from an external power adapter

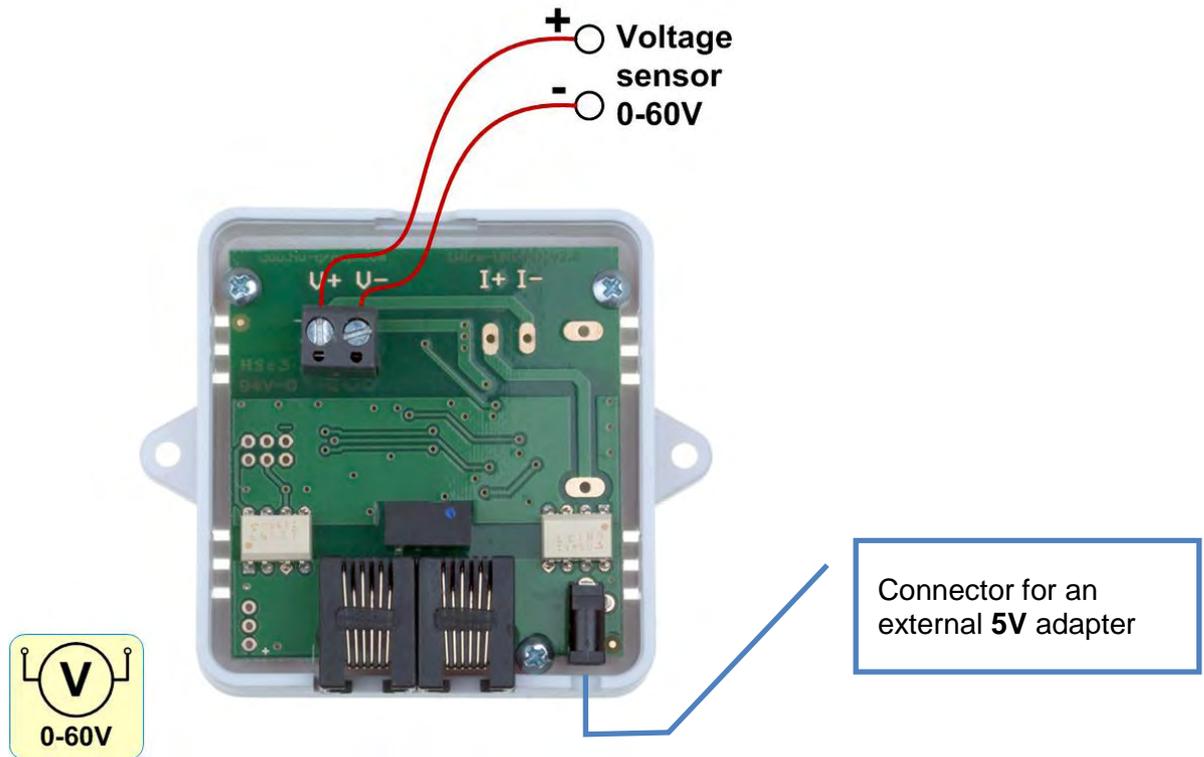


Applications

- Signal converter for 0-10V industrial probes
- Battery monitoring in telecommunication systems (telco -48V)
- Independent measurement of individual battery cells (electrically isolated)
- Measuring the voltage of 12V or 24V car batteries

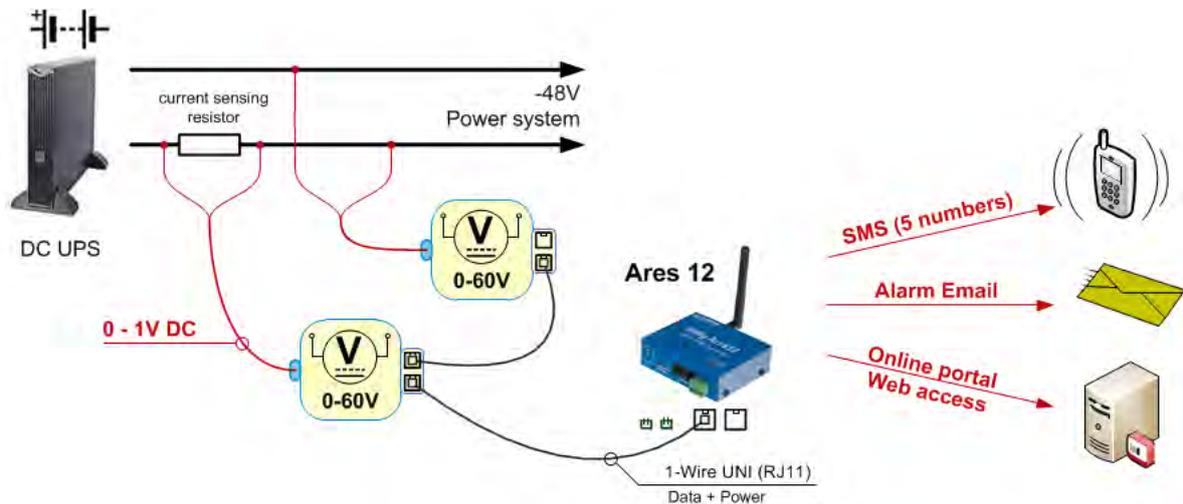


Basic features



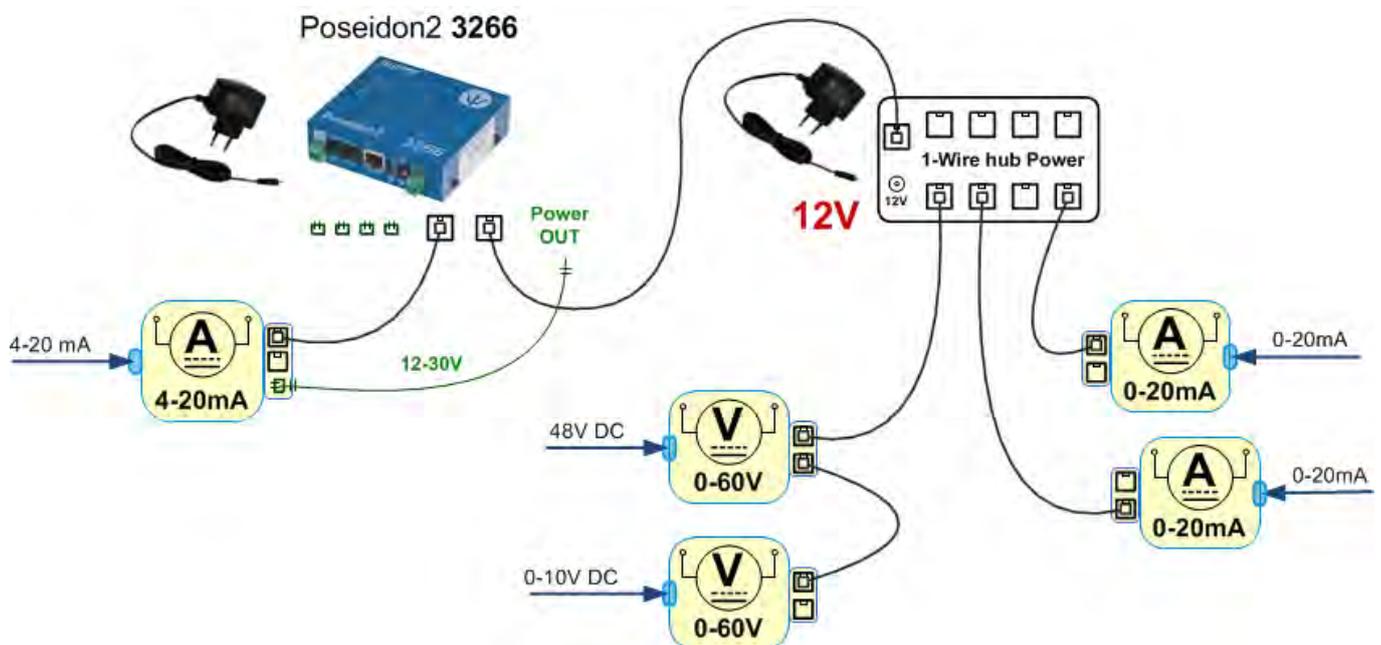
Bus	
Type	1Wire-UNI (RJ11)
Connects to	Poseidon2 xxxx, Ares xx, Poseidon 2250, Poseidon 4002, SiteMon5
Connector	2x RJ11 (sensors can be daisy-chained)
Maximum distance	60m (total line length from the active port)
Electrical isolation	1Wire-UNI bus is electrically isolated from the 0-60V input
Power	
Power supply	1Wire-UNI bus + external power adapter
External power	5VDC external power adapter can be used
Power limits	One active RJ11 port can power at most two sensors. To boost the power, use our "1-Wire hub Power" or an external power adapter.
Electrical isolation	0-60V input electrically isolated from the 1Wire-UNI (RJ11)
Sensor input	
Connector	2-pin terminal block (V+ , V-)
Measures	Electrical voltage 0 to 60VDC (0-1V, 0-10V, -48V DC, 0-60V)
Input range	0 to 60VDC (max. 70V)
Accuracy	2% of the full 60V range / 25°C
Sensor output	
Resolution	1 decimal place
Displayed units	Default: [V] 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 GSM monitoring of voltage and current in -48VDC telco systems



- The Ares GSM/GPRS unit powers two voltage sensors and reads data.
- One 0-60VDC sensor measures the voltage in the 48V supply system.
- Another 0-60VDC sensor measures the voltage at a current sensing resistor. This voltage in mV corresponds to the current through the resistor.
- Internal Ares battery provides back-up power to the converter.

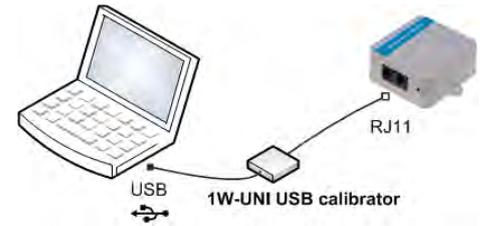
Several sensors on a single bus



- 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.