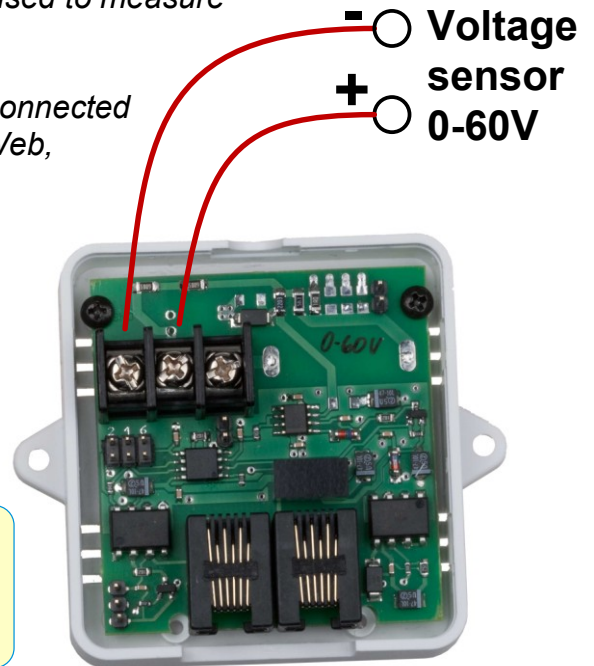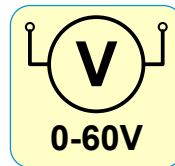# Voltage Sensor 0-60V DC
Electrically isolated voltage sensor for the 1Wire-UNI bus

Sensor for measuring voltages from 0 to 60V DC. Typically used to measure battery voltage in telco applications (-48V standard).
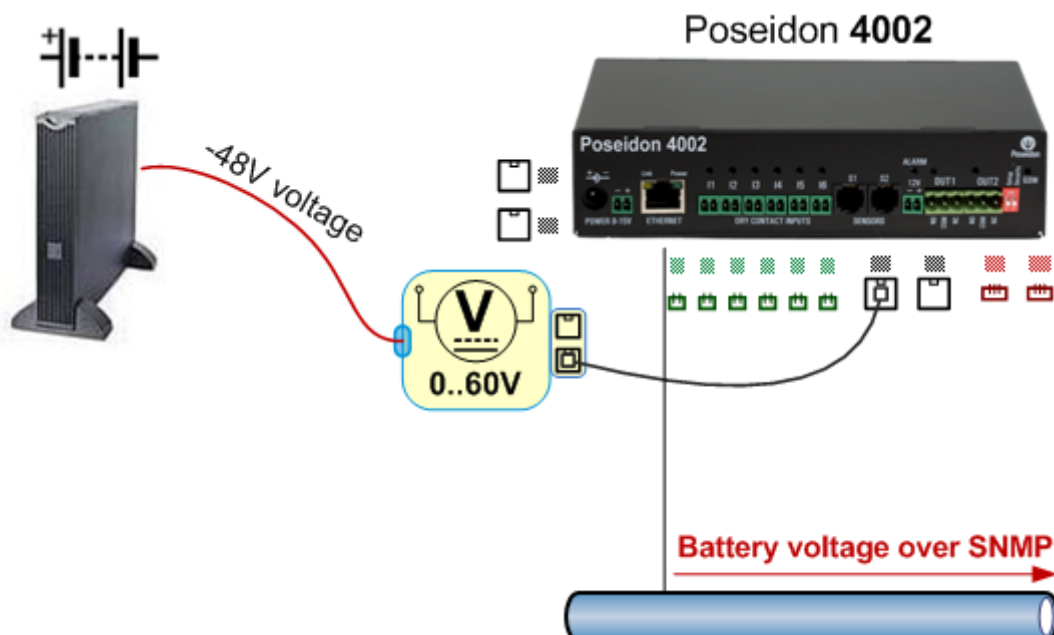
The sensor connects to the RJ11 1Wire-UNI bus. It can be connected to Poseidon and SiteMon units to measure values over IP (Web, M2M protocols).

- Measured voltage is electrically isolated from the 1Wire UNI bus. Negative voltages 0 to –60VDC can be also measured.

- The sensor can be connected to a Poseidon or SiteMon unit over the 1Wire-UNI bus. Voltage values are available over IP (**protocols: Modbus/TCP / SNMP / XML**).

- Sensors can be daisy-chained (two RJ11 connectors).

– Voltage
+ sensor 0-60V

V 0-60V

Typical applications

- Battery monitoring in telecommunication systems (telco –48V)

- Independent measurement of individual battery cells (electrically isolated)

- Measuring the voltage of 12V or 24V car batteries

Poseidon **4002**

Poseidon 4002

–48V voltage

V 0..60V

Battery voltage over SNMP

Basic features

BUS	
Type	1Wire UNI
Supported by	Poseidon 2250, Poseidon 4001, 4002, SiteMon5
Connector	2 pieces of RJ11 (bus input & bus output for the next sensor in the chain)
Topology	1) One sensor only, connected directly to RJ11 connector on a Poseidon (SiteMon) unit 2) Daisy-chained sensors, max. 2 electrically isolated probes powered from one RJ11
Power	Sensor powered with 5V from the main unit (Poseidon or SiteMon)
Max distance	10m total cable length from the Poseidon (SiteMon) unit to the sensor

SENSOR INPUT	
Input connector	2 pins of a 3-pin terminal block (I+ , I-)
Input range	0 to 60V (max. voltage 70V DC)
Input protection	-
Isolation	Electrically isolated (optocoupled) from the bus
Accuracy	2% of the full scale (5–60V)
Max distance	Limited by EMC interference & wiring (1 to 50m)
Installed fuse	-

SENSOR OUTPUT	
Resolution	10 bits = 1024 ticks on the scale
Displayed units	[V]
Reading period	Once per second

Physical parameters	
Operating conditions	0 to 65°C / 5 to 70% relative humidity
Dimensions / Weight	65 x 80 x 30 [mm] / 250 g

DIREKTRONIK

Direktronik AB tel. 08-52 400 700 www.direktronik.se

Product ordering numbers		
600 414	Sensor 20mA 1W-uni	0–20mA sensor, 1Wire UNI bus. Poseidon 2250, 4xxx and SiteMon
600 412	Sensor 15V 1W-uni	0–15V sensor, 1Wire UNI bus. Poseidon 2250, Poseidon 4xxx and SiteMon
600 413	**Sensor 60V 1W-uni**	0–60V (–48V) sensor, 1Wire UNI bus. Poseidon 2250, 4xxx and SiteMon
600 437	30A Current probe 1W-UNI	0-30A AC (110/230V) probe for 1Wire UNI. Poseidon 2250, 4xxx a SiteMon