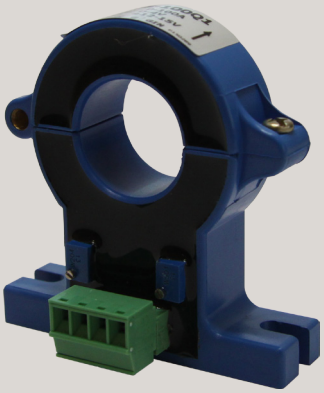
VUTLAN
Monitoring & Control Systems



Quick Installation & Configuration manual

AC Measurement HAT-100Q1 & VT407

Installation Manual AC measurement

Functional description & components

Function

Simple open loop AC current transducer HAT-100Q1 can measure AC currents in range of 0-100A. To transfer data to the monitoring system it can be used together with AC current transceiver VT407.

Components

The transducer consists of a plastic housing with open/closed AC current loop and 4 pins terminal connector. Current transceiver is a simple plastic case with 4 pins input, power 12V socket and analog 0-5V RJ12 output.

Safety instructions

- Please observe the valid regulations for installation in the country in which current transducer is installed and operated, and the national regulations for accident prevention. Please also observe any internal company regulations, such as work, operating and safety regulations.
- The technical specifications and limit values stated must not be exceeded under any circumstances. In particular, this applies to the specified ambient temperature range and IP protection category.

Siting location requirements

To ensure proper functionality, the conditions specified in section "Technical specifications" must be observed.

Installation procedure

Notes on assembly

- Be careful, transducers max. voltage for isolation is 2kV.
- The transducer can measure AC current on any current wire, not more then 10 mm in diameter. Just open the cover, insert the wire and close.
- Max. distance for AC current transducer from monitoring unit is 50 meters.

Installation

The transducer and the transceiver installed together.

- Mount transducer using M4 screws and M4 nuts. Distance between mounting holes is 50 mm.
- Mount current transceiver using M4 screws and M4 nuts. Distance between mounting holes is 60 mm.
- Use a 4-core flat cable and two green connectors supplied with the transceiver and the transducer to assemble the connecting cable.

Connection

Connect one end of RJ11 / RJ12 cable to monitoring unit and the other end to analog output of transceiver. Connect transceiver to power adapter 12V. Connect transceiver and transducer with Connecting cable. The monitoring system will automatically sense current transducer as sensor. Click on the current or voltage sensor element in the tree. A modal window with sensor properties will pop up. Change the name of the needed sensor, chage type of a sensor on "current", use Expression formula like 20*x with K=20, and click "Save" or "Apply" at the bottom of the "Properties" window. In the interface system tree You will see A (ampers) in front of the sensor.

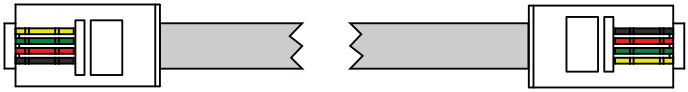
Testing transducers

Upon a time, the Hall sensor readings may vary due to physical reasons. On a sensor head You can see the two variable resistors, which can customize measuring. Change can be done only like a last resort!

Technical specifications

HAT-100Q1 / AC current transducer	
Dimensions	60 × 61 × 16 mm
Weight	150 g
Power input	-12V / +12V
Operating temperature	Min. -10° C, Max.80° C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Outputs	4 pin terminal
Power Consumption	1 Watt
Max. distance	50 m

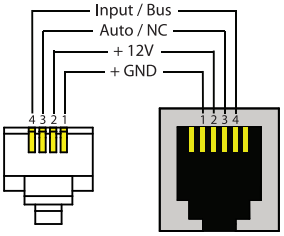
VT407 / HAT-100Q1	
Dimensions	68 × 47 x 26 mm
Weight	160 g
Inputs	RJ-12 / RJ-11
Operating temperature	Min. -10° C, Max.80° C
Operating humidity	Min. 5% - Max. 95% (Non-Condensing)
Power input	12V DC, 1A
Power Consumption	100 mW
Max. distance	50 m
Special Features	Transferred voltage - 0 .. 5V



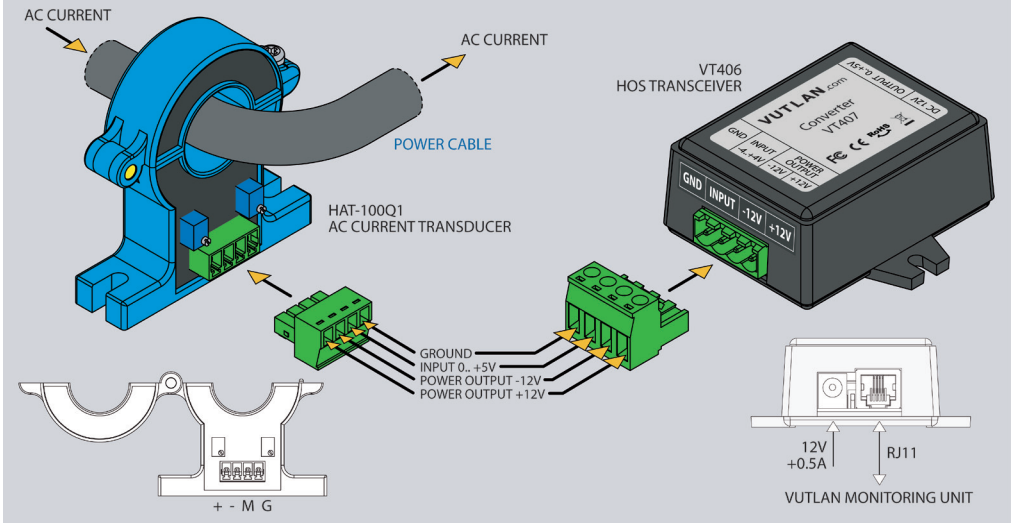
RJ11 (6p4c)

RJ11	Pins	Conductor	
1	GND	Black	
2	+12V	Red	
3	Auto/NC	Green	
4	Input	Yellow	

RJ11 (6p4c)



HAT-100Q1 / AC CURRENT TRANSDUCER CONNECTION



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