

EXT-ANALOG : ANALOG EXPANSION BOARD

Description

Expansion board EXT-ANALOG is a small electronic accessory, which is fixed on some TRMC modules. This card provides 8 channels of analog measurements. Thanks to this card, the dataloggers TRMC-19 and the TRMC-5 have analog inputs, which can be used in many applications (Hydrogeology, Industry, Geotechnics, ...).

The analog inputs are compatible with the signals of the sensors industry (4-20mA, ...).

The measurement card allows the power supply of the sensors which must be monitored. So a lot of energy is spared. The applications are battery powered for a long time.

The card has :

- ✓ 2 analog inputs 0-3V.
- ✓ 1 analog input 0-5V.
- ✓ 3 analog inputs 4-20mA, which bring the power to the mass, mode GND.
- ✓ 2 analog inputs 4-20mA, which measure the current of the power supply, mode VBAT.

Analog expansion board ideal to :

- ✓ Add analog inputs
- ✓ Increase the use of the devices TRMC-19 and TRMC-5
- ✓ Connect the analog sensors to the TRMC-19 or TRMC-5
- ✓ Connect a pressure probe to the TRMC
- ✓ Connect a pH probe to the TRMC
- ✓ Connect a temperature probe to the TRMC

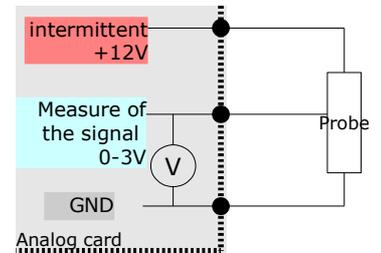


Measure of the voltage

It is easy to connect different kind of probes on this interface (see images below)

The probe (for example the pressure probe) is powered intermittently by a signal +12V. The expansion board measures the voltage of the probe. This one is then turned off.

The EXT-ANALOG card has two inputs to measure a signal between 0 and 3V and one input to measure a signal between 0 and 5V.

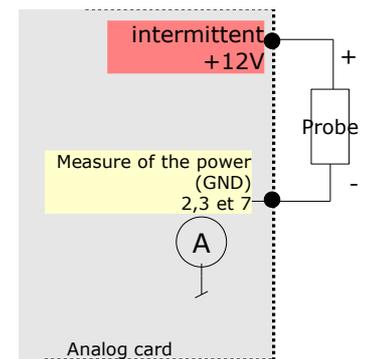


Measure of the power

The analog measurement card has two different kind of power measures:

- 1) Power measure which goes from the probe (with a resistance between the probe and the mass) mode GND.
- 2) Power measure which arrives in the probe (with a resistance between the probe and the battery) mode VBAT.

Mode GND



Our advantages

- ✓ Addition of features to the TRMC
- ✓ Possibility to use the TRMC in several applications
- ✓ The probe is switched on a short moment to make the measures. The energy is so spared.

Mode VBAT

