

ACQ-01

ULTRAHIGH-PRECISION NTC METER



ACQ-01 is an ultrahigh-precision NTC meter. It is an ultralow noise acquisition system for thermistors, it accurately reads up to 6 thermistors simultaneously, and it is provided with a dedicated software for precise temperature monitoring and recording.

SPECIFICATIONS

- Number of channels: 6 (simultaneously)
- PGA gain values: 1, 64, and 128
- Resolution: typ. 5 mΩ (PGA x1), 38 μΩ (PGA x128) and typ. 12 μ°C (PGA x1), 97 n°C (PGA x128)
- Accuracy: typ. 0.02%
- Resistance range (recommended): 30 Ω to 3 MΩ (PGA x1)
- Temperature range (recommended): -55 °C to +200 °C (PGA x1)
- NTC thermistor resistance at 25°C: 10 K
- Sampling rate: 5 S/s
- Ambient temperature sensitivity: 10 μ°C/°C
- Input connectors: SMA female
- Interface: dedicated software
- Product dimensions: 155 x 144 x 29 mm³
- Product weight: approx. 900 g



PERFORMANCES

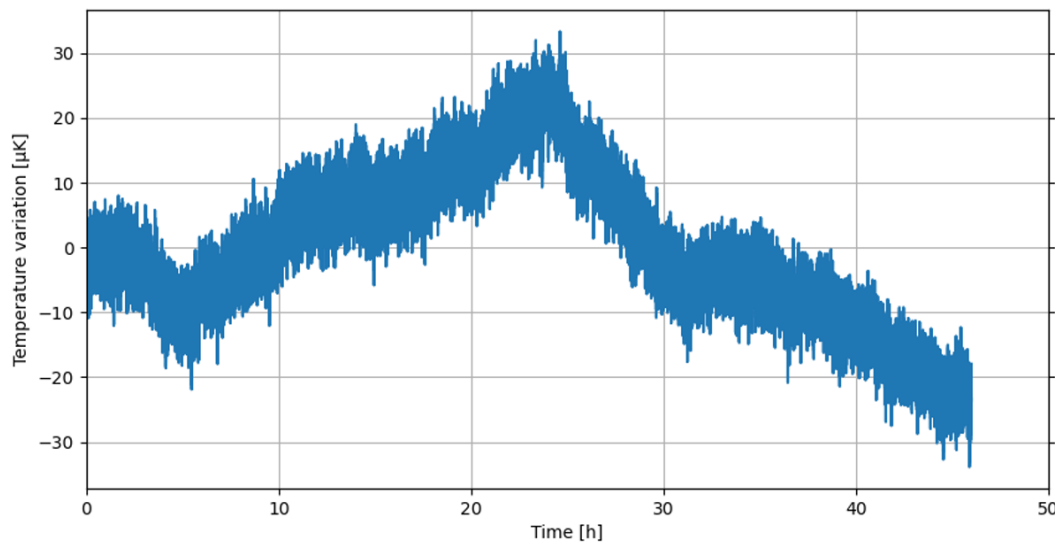


Fig.1: Out-of-loop measurement of the temperature stability of OFD-PRO using ACQ-01.

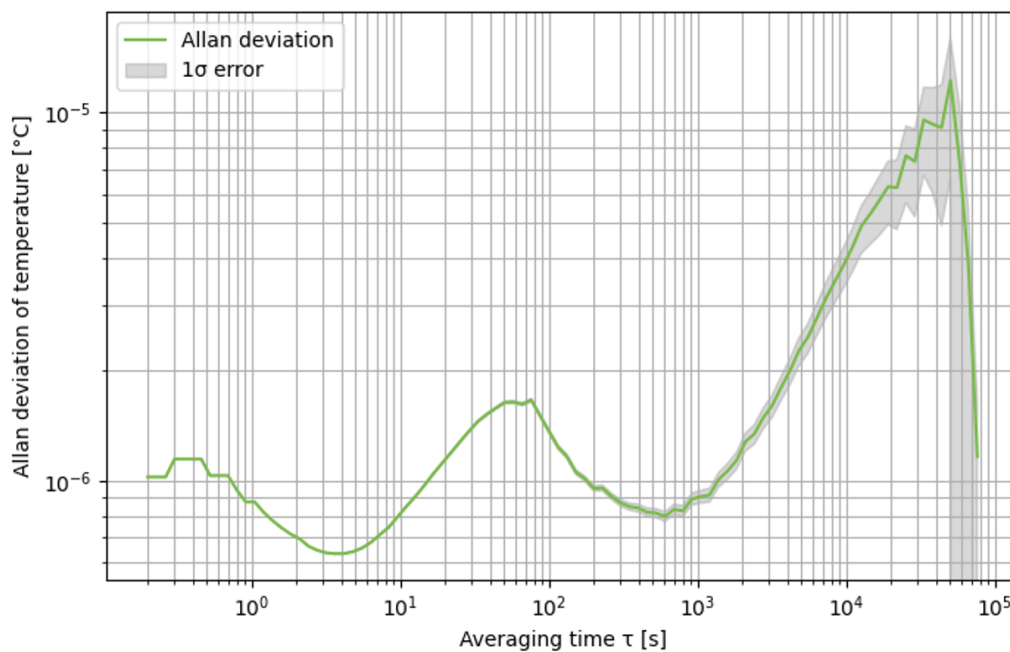


Fig.2: Out-of-loop measurement of the temperature stability (Allan deviation) of the OFD-PRO using ACQ-01.

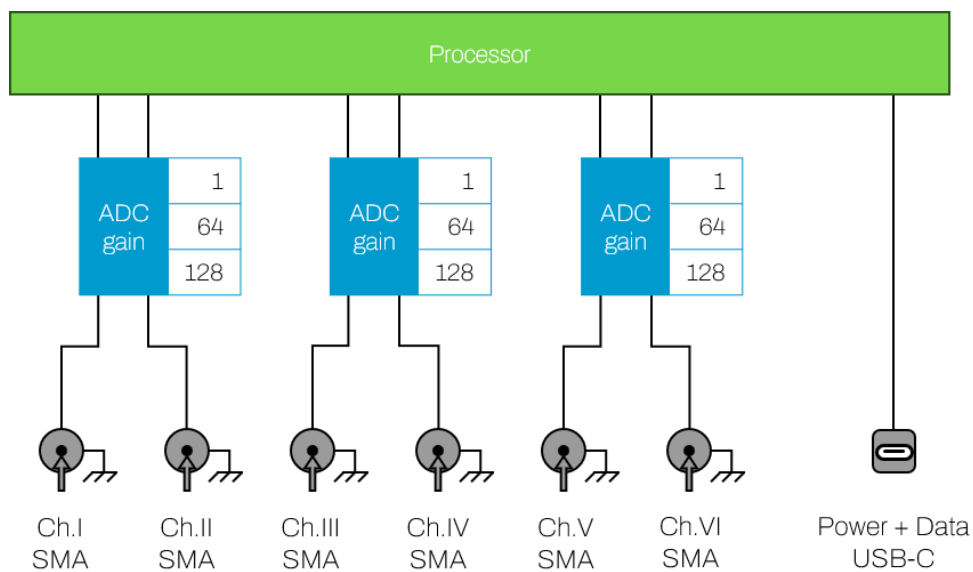


PRODUCTS



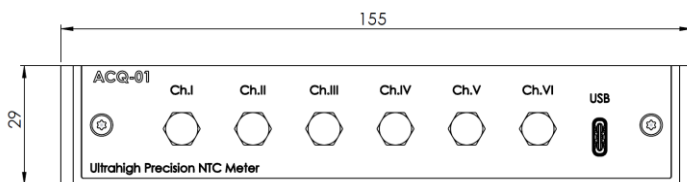
FUNCTIONAL DIAGRAM

The functional diagram is a simple view of what the instrument does. It enables a fast and simple understanding of the internal functionalities in respect to the system inputs and outputs.



DRAWINGS

The dimensions of the device are presented here with a simplified view. It also shows the connections from the front and back view of the instrument.



FRONT



BACK

Dimensions are in [mm]