

# Temperature logger

## NanoVACQ Thermocouple



Measure temperature in your thermal processes up to 1300°C with a small thermocouple logger.

**NanoVACQ 3TH** is a cylindrical logger with three thermocouple channels. With its small diameter, its measurement range up to 1300°C and its operating range up to 140°C, it is a solution specially designed for thermal processes requiring temperature measurement in industrial environment and quick response time.

A thermal shield adapted to the application can be used for temperatures beyond 140°C up to 1300°C.

*Among the most common applications:*

- Bottle depyrogenation in pharmaceutical industry.
- Internal and external varnish polymerization of aluminum bottles and sprays in packaging industry.
- All tube manufacturing processes in metal industry like pipe spinning, annealing, hot piercing, coating, etc...



### Metrology

- **Optional memory extension** (261 700 acquisitions divided by number of channels)
- **Operation range:** From 0°C to 140°C
- **Thermocouple measurement range:** Type K up to 1300°C
- **Resolution and noise:** 16 bit converter, resolution :  $\pm 0.1$  °C
- **Calibration uncertainty:**  $\pm 0.1$  °C from 0°C to 140°C

### Technical specifications

- **External materials:** 316 L stainless steel
- **Temperature sensors:** Pt1000 for cold junction and internal temperature Thermocouple according to specifications
- **Dimensions:** Diameter: 31 mm Height: 75 mm
- **Memory capacity:** 65100 acquisitions divided by number of channels
- **Programmable acquisition rate:** minimum 1 second, maximum 59 minutes and 59 seconds.
- Programmable acquisition duration
- Programmable recording start by date, hour, minute.
- Battery replaceable by the user.
- **Battery life:** Varies with acquisition period and use conditions:
  - 700 hours for a 5-second rate
  - 340 hours for a 1-second rate
- Nonvolatile memory (EEPROM)

### Software operating conditions

- Data transfer with a communication interface connected to the USB port.
- Operates in **Windows® XP (SP3)/VISTA/7/8.**
- TMI-ORION software (logger programming, registered data reading...)

#### NOTA :

*A yearly checkup with our after-sale department is recommended: replacement of water tightness O-rings, overall operating checkup, metrological adjustment.*