

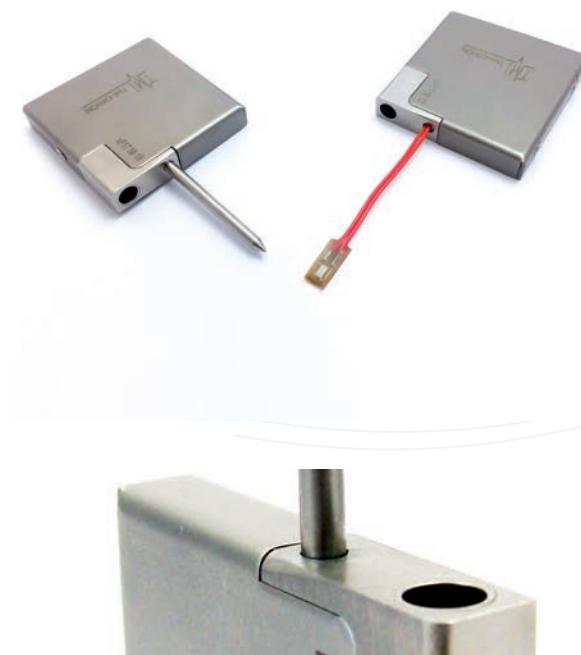
# DATA SHEET

# TMI-Orion

# NanoVACQ xFlat Temperature

Temperature control inside thin layer materials such as wood or plasterboard.

NanoVACQ xFlat is a temperature data logger equipped with one external sensor at the end of a rigid or flexible probe.



Thanks to its small size the NanoVACQ xFlat has no impact on the physical parameters of the environment.

It fits into thin materials such as wood, plasterboard or into any other narrow space processes.

## METROLOGY

	Operating range	Resolution	uncertainties*
<b>NanoVACQ xFlat</b>	From -20°C to +140°C	$<\pm 0.06$ °C	$\pm 0.5$ °C from 0°C to +140°C ( $\pm 0.2$ °C optional)

Each logger can be calibrated and adjusted at the temperature points corresponding to the user's needs.

*\*The specified uncertainties correspond to two standard deviations. The uncertainties are calculated taking into account the various significant error sources, including the calibration probes, the equipment, the environmental conditions, the influence of the logger, repeatability, etc...*

## FUNCTIONS

- Start set up: immediate or delayed
- Time stamped measurement data
- Battery level alert with Qlever software

## TECHNICAL SPECIFICATIONS

Model	Number of external channels	External Probe type	Probe dimensions
NanoVACQ xFlat 1Tc	1	Rigid (SS 316L)	D. 3 mm L. 35 mm (other lengths possible)
NanoVACQ xFlat 1Td	1	Pt1000 (flat probe) At the end of a flexible probe (PTFE)	5 x 12 x 2 mm Length to be determined

<b>Watertightness</b>	No - This logger must not be used in autoclaves
<b>Material</b>	Logger body: 316L Stainless steel
<b>Dimensions of the body</b>	42 mm x 42 mm x 7,5 mm
<b>Temperature sensor</b>	Pt 1000
<b>Memory capacity</b>	16 000 acquisitions
<b>Acquisition rate</b>	Programmable: minimum 1 second, maximum 59 minutes and 59 seconds
<b>Program duration</b>	Programmable: days, hours, minutes
<b>Recording</b>	Programmable start: by date, hour, minute
<b>Power</b>	User replaceable battery pack
<b>Connectivity</b>	USB wired interface to the PC



NanoVACQ xFlat 1Tc



NanoVACQ xFlat 1Td



## AUTONOMY

The NanoVACQ xFlat is powered by a battery pack; its autonomy depends on the environment and the operational conditions of the application (temperatures at both ends of the mentioned temperature range, data acquisition rate).

As a result of the variety of environments and operational conditions, TMI-Orion does not guaranty the battery lifetime and recommends that the user determine the battery lifetime according to his own process conditions and experience.

## SOFTWARE AND RELATED PRODUCTS

**NanoVACQ xFlat is used with Qlever software.**

**Qlever software platform:** data acquisition, management and visualization of data from TMI-Orion data loggers. Qlever

is installed on a PC and operates under Windows® Vista/7/8/10. Data transmission and visualization are done after the industrial process.

## DELIVERABLES

**The NanoVACQ xFlat solution usually includes the following items:**

- The NanoVACQ xFlat data logger with a battery pack
- The NanoVACQ xFlat calibration certificate (optional)

- The NanoVACQ xFlat configuration and calibration file
- Qlever software (to be ordered separately)
- A USB wired interface to the PC (to be ordered separately)
- A transport case (optional – to be ordered separately)

## SERVICES

**Maintenance:** TMI-Orion recommends annual preventative maintenance and calibration service for the replacement of o-rings, functional checking, calibration and adjustment.

**Accessories:** The battery packs, engineered by TMI-Orion, are replaceable by the user and are referenced in the documents available on our web site.

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