

DATA SHEET

TMI-Orion

PicoVACQ Humidity and Temperature



Relative humidity and temperature measurement.

PicoVACQ Humidity and Temperature is a very small data logger (15 mm in diameter) for relative humidity and temperature measurement. It is equipped with one humidity sensor and one internal temperature sensor.

METROLOGY

	Operating range	Batteries	Temperature resolution	Humidity resolution	Uncertainties*
PicoVACQ HT	From -40°C to +85°C	015M	0.02°C	0.01 % RH	Humidity: ± 3 % RH (Optional: ± 2 % RH) Temperature : ± 0.1°C from 0°C to 80°C (Optional: ± 0.05°C) ± 0.2°C from -30°C to 0°C
		015PW			
PicoVACQ HT Ex		015M			

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	External channel	Humidity probe type	Internal temperature probe type	Watertightness	ATEX compliance
PicoVACQ HT	1	Capacitive	Internal platinum sensor for humidity sensor compensation		
PicoVACQ HT Ex	1				●

Material	316L Stainless steel			
Dimensions of the logger	Diameter	Height	Battery pack	Operating range
	D.15 mm	H.59 mm	015M	
		H.67 mm	015PW	
Memory capacity	8 000 acquisitions per measurement channel			
Acquisition rate	Programmable: minimum 1 second, maximum 59 minutes and 59 seconds			
Program duration	Programmable: days, hours, minutes			
Recording	Programmable start: by day, hour, minute or on temperature threshold			
Power	User replaceable battery pack			
Connectivity	USB wired interface to the PC			
ATEX compliance	Please refer to specific documentation on our website			



PicoVACQ HT



AUTONOMY

The PicoVACQ Humidity and Temperature is powered by a battery pack; its autonomy depends on environment and operational conditions of the application (extreme temperatures, 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.

As an indication, the following is generally observed:

- with battery pack 015M : autonomy of 250 hours for a 1-second rate.
- with battery pack 015PW : autonomy of 600 hours for a 1-second rate.

SOFTWARE AND RELATED PRODUCTS

PicoVACQ Humidity and Temperature 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.

This logger also exists in an ATEX version for use in explosive environments. Download specific datasheet from our website.

DELIVERABLES

The PicoVACQ Humidity and Temperature solution usually includes the following items:

- The PicoVACQ Humidity and Temperature data logger with a battery pack
- The PicoVACQ Humidity and Temperature calibration certificate

- The PicoVACQ Humidity and Temperature 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 specific datasheet on our website.

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