**SC METROMAT SRL**

**Compartimentul Comercial: 505600 - Sacele - Piata Libertatii nr.2 - tel/fax: 0268 275 212; 0268 276 807 e-mail: sales@metromat.ro - comert@metromat.ro**

# Logger de temperatura, VACQ xFlax

DATA SHEET

# TMI-Orion

# VACQ xFlat




**Measurement of temperature at various points for thermal process control.**

The VACQ xFlat is a data logger designed to fit into flat access furnaces. It has to be protected by a thermal shield when temperature exceeds +140°C.

It is particularly appreciated when monitoring temperature in dry heat processes.

## METROLOGY

| Models | Number of thermocouple channels | Batteries | Operating range | Temperature and noise resolution | Internal reference channel calibration uncertainties* |
|---|---|---|---|---|---|
| **VACQ xFlat 1.4** | **4** | VXP1 | From 0°C to 140°C | 16 bit converter, resolution: <±0.1 °C | +/- 0.1°C from 0°C to +140°C |
| **VACQ xFlat 1.8** | **8** | VXP3 | | | |
| | | 015S | | | |
| **VACQ xFlat 2.4** | **8 (2 rows of 4)** | VXP1 | From 0°C to 140°C | | |
| | | VXP2 | From -55°C to 140°C | | |
| **VACQ xFlat 2.8** | **16 (2 rows of 8)** | 015S | From -55°C to 140°C | | |

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

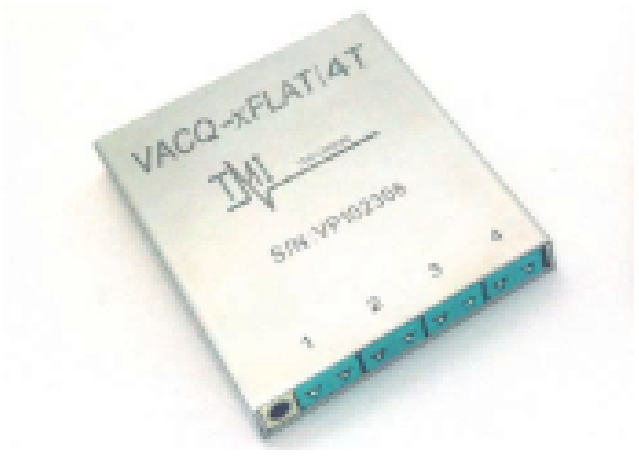


## TECHNICAL SPECIFICATIONS

| | | | |
|---|---|---|---|
| **Material** | Logger body: 316L Stainless steel | | |
| **Dimensions** | VACQ xFlat 1.4 | L.82 mm x H.11 mm x W.107 mm | |
| | VACQ xFlat 1.8 | VXP3 battery pack | L.153 mm x H.11 mm x W.80 mm |
| | | 015S battery pack | L.150 mm x H.20 mm x W.80 mm |
| | VACQ xFlat 2.4 | L.82 mm x H.21 mm x W.107 mm | |
| | VACQ xFlat 2.8 | L.150 mm x H.20 mm x W.80 mm | |
| **Number of channels** | VACQ xFlat 1.4 | 4 connected thermocouple elements<br>1 internal reference channel<br>1 reference channel for cold junction and internal temperature of the box | |
| | VACQ xFlat 1.8 | 8 connected thermocouple elements<br>1 internal reference channel<br>1 reference channel for cold junction and internal temperature of the box | |
| | VACQ xFlat 2.4 | 2x4 connected thermocouple elements<br>1 internal reference channel<br>1 reference channel for cold junction and internal temperature of the box | |
| | VACQ xFlat 2.8 | 2x8 connected thermocouple elements<br>1 internal reference channel<br>1 reference channel for cold junction and internal temperature of the box | |
| **Temperature sensor** | Thermocouples type K (full scale +1300°C), or type T (full scale +400°C),<br>or other types upon request (J, N, ...) | | |
| **Memory capacity** | VACQ xFlat 1.4 | 43 000 acquisitions per thermocouple channel | |
| | VACQ xFlat 1.8 | 26 100 acquisitions per thermocouple channel | |
| | VACQ xFlat 2.4 | 26 100 acquisitions per thermocouple channel | |
| | VACQ xFlat 2.8 | 13 700 acquisitions per thermocouple channel | |
| **Acquisition rate** | Programmable: minimum 1 second, maximum 59 minutes and 59 seconds | | |
| **Program duration** | Programmable: days, hours, minutes | | |
| **Recording** | Programmable start: by date, hour, minute | | |
| **Power** | User replaceable battery pack<br>Option: Power adaptor supplied with VXPS battery pack (From 0°C to 70°C) | | |
| **Connectivity** | USB wired interface to the PC | | |



**VACQ xFlat 2.8**




**VACQ xFlat 1.4**

## AUTONOMY

The VACQ xFlat is powered by a battery pack; its autonomy depends on environment and operational conditions of the application (extreme temperatures, radio range, electromagnetic disturbances, data acquisition and transmission 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

**VACQ xFlat is used with Qlever software platform.**

**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.

- VACQ xFlat products family includes VACQ xFlat FullRadio for full wireless data logging real time monitoring.

NOTA: Aceasta fisa a fost realizata sub rezerva modificarilor ulterioare de ordin tehnic sau a erorilor de editare.

Fotografia are caracter informativ.

NOTE: Products and specifications are subject to change without prior notice .Pictures may differ from original.