

Temperature, humidity and shrinkage data logger

CeriDry



Control of temperature, humidity and shrinkage in drying processes of bricks, tiles and ceramics.

CeriDry correlates the evolution of humidity rate and air temperature with the shrinkage of bricks, tiles or ceramics while they dry. It also enables the acute evaluation of drying within two parts of the same brick or tile.

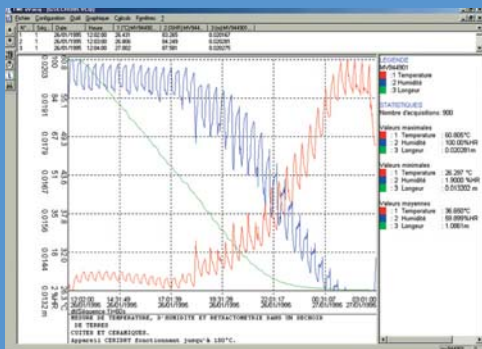
The development was done in cooperation with CERIC, a KEYRIA company, specialized in tile, brick and ceramics equipments, to answer the needs of these industries.



Metrology

- **Operation range:**
 - Temperature..... from -30°C to 150°C
 - Humidity..... from 0 to 100 %RH
 - Shrinkage..... movement of 20 mm
- **Uncertainty:**
 - Temperature..... +/- 0.2°C from 0°C to 140°C
 - Humidity..... +/- 4 %RH from 2% to 98 %RH
 - The uncertainty corresponds to 2 standard deviations.*
- **Resolution:**
 - Temperature..... +/- 0.02°C
 - Humidity..... +/- 0.05 %RH
 - Shrinkage..... +/- 0.01 mm
- Each logger can be calibrated and adjusted at the temperature points corresponding to the users' needs.

Technical specifications



Software operating conditions

- **Material:** 316 L stainless steel
 - **Dimensions:** length 169 mm, width 55 mm, height 52 mm
 - **Temperature sensor:** Pt100
 - Capacitive humidity sensor
 - Linear potentiometer shrinkage measurement
 - Positioning support in 3 points
 - **Memory capacity:** 16 000 acquisitions per measurement channel
 - **Programmable acquisition rate:** minimum 1 second, maximum 59 minutes and 59 seconds
 - Programmable acquisition duration
 - Programmable recording start by date, hour, minute
 - User replaceable high temperature battery
 - Non volatile memory (EEPROM)
- Data transfer with a communication interface connected to the serial or USB port.
 - Operates under Windows® 98/Me/NT/2000/XP

NOTA:
A yearly maintenance is advised for O-rings replacement, recalibration and adjustment.