

# Pirani Vacuum Logger with thread



A pressure data logger for **plasma** (hydrogen peroxide) autoclaves and very low temperature and extreme vacuum **freeze drying** processes with very high features. This is the version with a 1/2 Gass thread for external mount on autoclaves.

Two combined sensors, one for extreme vacuum and one for higher pressures, up to 1200 bar allow to obtain an incredible accuracy of  $\pm 0.0003$  and a resolution of 0,0001 mbar.

The software is Windows based and communicates by means of a USB interface (DiskInterface HS).

**Battery is user replaceable** and the data logger is **provided with an Accredia (NIST equivalent) traceable certificate** on different points.



## Main features

- Resists up to 85°C
- Available in two versions: standard and with 1/2 Gass threaded connector
- Temperature channel with internal sensor for testing
- Low battery consumption for an extended battery life
- User **replaceable battery (software shows battery status)**
- Reference traceable calibration certificate included
- Available **extended calibration from -60°C** (order extra calibration points)

## Plus

- Extremely high accuracy and precision in extreme vacuum
- Easy to use
- Battery with extremely extended life
- Printed reports compliant with health regulations and ISO (data are not editable in the software)

## The system

The system is made up by:

- Pirani Vacuum Logger pressure data logger
- DiskInterface HS
- TS Manager or HumiPressureDisk software

## Accessories

- TS Manager
- HumiPressureDisk
- DiskInterface HS

## Applications



Validation



Pharmaceutical



Laboratories



Medical



Healthcare



Sterilisation



Cosmetics



Freeze-drying

## Technical specifications

Dimensions	84 h X 30 Ø (mm) - 31 Ø (mm) peek ring
Weight	160 g
Materials	Stainless steel AISI316L, PEEK
Temperature range	-60 °C ÷ +85 °C
Standard calibration points (temperature)	0/25/50/75°C
Extra calibration points (temperature)	Within the range -20 °C ÷ +85 °C
Temperature resolution	0,01 °C
Temperature accuracy	± 0,1 °C from 0 °C to +85 °C
Pressure range	0,001 mbar ÷ 1200 mbar absolute
Standard calibration points (pressure)	0,01/0,02/0,05/0,1/0,2/0,5/1/2/5/10/50/100/300/500/1000 mbar absolute @ t. amb (25°C +/-10°C)
Extra calibration points (pressure)	Within the range 0.01 mbar ÷ 1200 mbar absolute
Pressure resolution	0.0001 mbar
Pressure accuracy	± 0,0005 (0,001 ÷ 0,005) / ± 0,0003 (0,005 ÷ 0,01) / ± 0,01 (0,01 ÷ 0,1) / ± 0,05 (0,1 ÷ 0,5) / ± 0,1 (0,5 ÷ 1) / ± 0,5 (1 ÷ 5) / ± 2 (5 ÷ 10) / ± 3 (10 ÷ 50) / ± 5 (50 ÷ 1000); all values in mbar
Memory (n. of acquisitions)	43.690
Acquisition step	From 1 every second up
Battery life	+19.000.000 acquisitions at 1 second step continuously (calculated time @25°C. Battery life may be shorter if used in low temperatures)
Accessories	DiskInterface HS