PN Series – PT100 1V

Temperature indicator display
Portable RTD, PT50, 100, 200, 500,1000

Ref : 2596
Rev :

DESCRIPTION

Digital standalone portable display for resistive probes, RTD PT 50, 100, 200, 500,1000 etc., very easy to use, with good accuracy. This thermometer is perfectly suited for field use in extreme environmental conditions, as well as in metallurgy, automotive, engineering, energy, research, laboratory… sectors.
MESUREX performs calibration with or without associated sensors. Calibration has become indispensable for industry to validate measurements and ensure the drift of values, if any.
During your quality audits, remember to return your device with its sensors for the periodic calibration planned in your processes.
Each device or sensor has traceability with a serial number.

MEASURING RANGES

Sensor	Measuring range / specific emission	Resolution	Precision / 1 year measuring
Pt50 (α = 3851)	-220°C à +850°C	0,01°C	0,012% L + 0,06°C
Pt100 (α = 3851)	-220°C à +850°C	0,01°C	0,012% L + 0,05°C
Pt100 (α = 3916)	-200°C à +510°C	0,01°C	0,012% L + 0,05°C
Pt100 (α = 3926)	-210°C à +850°C	0,01°C	0,012% L + 0,05°C
Pt200 (α = 3851)	-220°C à +1200°C	0,01°C	0,012% L + 0,12°C
Pt500 (α = 3851)	-220°C à +1200°C	0,01°C	0,012% L + 0,07°C
Pt1000 (α = 3851)	-220°C à +760°C	0,01°C	0,012% L + 0,05°C
Ni100 (α = 618)	-60°C à +180°C	0,01°C	0,012% L + 0,03°C
Ni120 (α = 672)	-40°C à +205°C	0,01°C	0,012% L + 0,03°C
Ni1000 (α = 618)	-60°C à +180°C	0,01°C	0,012% L + 0,03°C
Cu10 (α = 427)	-50°C à +150°C	0,01°C	0,012% L + 0,18°C
Cu50 (α = 428)	-50°C à +150°C	0,01°C	0,012% L + 0,06°C

Conductive measuring probe 2-,3- or 4-Wire: automatic recognition of the number of connected wires, with display on the screen.
Precision given for a wiring of the 4-Wire temperature sensor.
Take into account the temperature sensor's own error and the conditions of its implementation.
Measuring current: 0,65 mA
Temperature coefficient: <10% of precision/°C

TECHNICAL CHARACTERISTICS & FUNCTIONALITIES

Additional functionalities

Calibrated sensors	This function enables to create a database of sensors whose parameters can be modified following calibration by integrating point-to-point corrections
Data storage	This function enables to record measurements either manually or automatically
Statistical calculation	Permanent display of the average, minimum and maximum of the measurement signal, as well as the number of measurements made
Memory	Recording capacity of 10,000 time-stamped values in one or more bursts of acquisition

Environmental specifications

Field of reference	23°C ± 5°C (HR: 45 to 75% without condensation)
Nominal operating field	-10 to 50°C (HR: 20 to 80% without condensation)
Range operating field	-15 to 55°C (HR: 10 to 80% without condensation)
Storage conditions	-30°C to +60°C
Operation altitude	0 to 2200 m
Protection index	IP54 according to EN60529

Security

Protections	➢ Electronic: up to 250V on "tension" wires ➢ By fuse for "electric supply" wires ➢ Against opening of "electric supply" circuit when measuring inductive resistances
Class	Compliant with European standard EN 61010-1, Category II, pollution 2
Tension assignation with reference to ground	60V
Resistance to vibration, jolts and shock	EN 61010-1
Conformity CEM	Immunity: ➢ Electrostatic discharges: EN 61000-4-2 ➢ Radiated fields: EN 61000-4-3 ➢ Shock wave: EN 61000-4-5 ➢ Conducted disturbances: EN 61000-4-6 ➢ Voltage dip: EN 61000-4-11 ➢ Burst: EN 61000-4-4 Conducted and radiated emissions : ➢ EN 55022, B class ➢ EN 61000-3-2 ➢ EN 61000-3-3

General characteristics

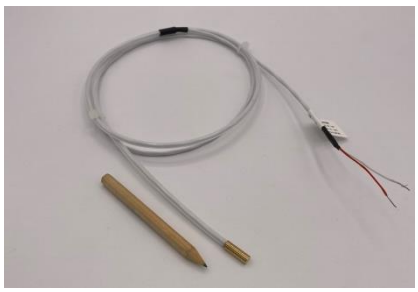
- Front protection IP 54
- Mass 306g
- Resolution up to 0.01°C
- Scaling for sensor correction
- Graphic display with backlight and contrast adjustment
- Power supply 4 AA batteries included (rechargeable battery optional)
- Dimensions 157x85x45 mm

Accuracy at 1 year

0.012%+0.05°C in PT100

Association with different resistive probes RTD **Mesurex design and built**





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