

Datasheet

RS PRO Digital Panel Meter Display for Pt / Ni Sensors and Resistors

Stock number: 188-3478



THERMOMETER FOR PT/Ni SENSORS

- 4-digit projection
- Input: Pt 100/500/1 000
Ni 1 000/10 000
0...3900 Ω
- Digital filters
- Size of DIN 51,5 x 29,5 mm
- Power supply 24 V AC/DC

188-3478 is a 4-digit thermometer for resistive Pt/Ni sensors. The instrument is based on a microcontroller and an A/D converter, which ensures good accuracy and easy operation of the instrument.

The 22 mm cross-section of the circular instrument body allows its convenient mounting into mosaic and signaling panels.

OPERATION

The instrument is set and controlled by two buttons located on its the body.

Standard equipment is the OM Link USB interface, which, when using the control program, allows you to edit and archive all device settings and to update firmware.

All settings are stored in FLASH memory (they hold even after the power is turned off).

STANDARD FUNCTIONS

PROGRAMMABLE PROJECTION

Selection: of input type and measuring range
Projection: -999...9999

COMPENSATION

Of conduct: automatic (3-wire) or manual in menu (2-wire)
Of conduct in probe: internal connection (conduct resistance in measuring head)

TECHNICAL DATA

INPUT

Number of inputs	1
Pt Type	optional in configuration menu EU > 100/1 000 Ω, 3 850 ppm -50°...450°C US > 100 Ω, 3 920 ppm/°C -50°...450°C RU > 100 Ω, 3 910 ppm/°C -200°...450°C
Conect.	2 or 3-wire
Ni Type	optional in configuration menu Ni 1 000, 5 000 ppm/°C -50°...250°C Ni 1 000, 6 180 ppm/°C -200°...250°C
Conect.	2 or 3-wire
OHM Type	optional in configuration menu 0...390 Ω 0...3 900 Ω
Conect.	2 or 3-wire

PROJECTION

Display: -999...9999, single color 7-segm. LED
Digit height: 14 mm
Display color: red
Decimal point: adjustable - in menu
Brightness: adjustable

INSTRUMENT ACCURACY

TK: 50 ppm/°C
Accuracy: ±0,15% of range + 1 digit
 (for projection -999...1999)
Rate: 0,5...100 measur./s
Overload capacity: 2x; 10x (t < 30 ms)
Resolution: 0,1°C
Line compensation: max. 30 Ω
Watch-dog: reset after 500 ms
Calibration: at 25°C and 40 % r.h.

POWER SUPPLY

Range: 24 V DC/AC, ±10 %, PF ≥ 0,4,
 $I_{STP} < 45 \text{ A}/1,1 \text{ ms}$
Consumption: < 0,2 W/0,2 VA

MECHANIC PROPERTIES

Material: PA66, incombustible UL 94 V-I
Dimensions: 51,5 x 29,5 x 66 mm (w x h x d)
Panel cutout: Ø 22,5 mm

OPERATING CONDITIONS

Connection: connector terminal blocks,
 section < 1,3 mm²
Stabilization period: within 5 minutes after
 switch-on
Working temperature: -20°...60°C
Storage temperature: -20°...85°C
Protection: IP65 (front panel only)
El. safety: EN 61010-1, A2
Dielectric strength: 700 VAC per 1 min test
 between supply and input
Insulation resistance: for pollution degree II,
 measuring cat. II,
 power supply > 250 V (PI)
EMC: EN 61326-1

PI - Primary insulation, DI - Double insulation

CONNECTION

