

TempMaxx

Flexible, electronic HVAC temperature transducer for external PT 100 / 1'000 / Ni 1'000 / NTC probes



Connections PT /Ni / NTC probes :

Resistor temperature sensors DIN EN 60751

- **PT 100** (0,4 Ohm/K) -50 ... +400°C
Connection : 2-, 3- or 4-wire technology
Tolerance class : 1/3 B, A, B, 0.5
- **PT 1'000** (4,0 Ohm/K) -50 ... +400°C
Connection : 2-, 3- or 4-wire technology
Tolerance class : 1/3 B, A, B, 0.5

Resistor temperature elements DIN 43760

- **Ni 1'000** (5,5 Ohm/K) -50 ... +200°C
Connection : 2-, 3- or 4-wire technology
Tolerance class : 1/3 B, A, B, 0.5
- **NTC Beta Therm** (30 kOhm) -20...°80°C
Connection : 2-wire technology
Tolerance class : +/- 0.15K



General information

The **TempMaxx** is an intelligent and very flexible instrument for the measurement of gaseous media (*fresh air*) as well as liquids. For that purpose all kind of temperature probes in 2-, 3- or 4-wire technology can be connected to the transmitter. Depending on application, measurement range and accuracy, different **PT 100 / 1'000, Ni 1'000** or **NTC** probes in various designs can be used.

These can be plunge sensors, surface-, air-, liquid-, outdoor-sensors etc..

The **TempMaxx** converts the resistor signal to a standardised voltage and current signal (*U & I*) and shows the value on a big, clear LCDisplay.

All probes can be adjusted individually and the analogue output signal can be scaled.

Additional functions such as **alarm** settings respectively definition of the working range and the possibility of a 2-point **control**, widen the field of applications. The necessitate digital output in the form of a **relay contact** is already integrated.

The easy settings by the intuitive instrument menu is another advantage of this versatile measurement device. All setting parameters can be protected by a password.

Thanks to the use of modern microprocessor technology and circuitry a **high measurement accuracy, long term stability and flexibility** is achieved.

The robust and ergonomic plastic housing provides ideal installation options.

TempMaxx, the instrument for accurate and flexible temperature measurement, monitoring and control. Made in Switzerland.

Features

- High flexibility in connection of PT/ Ni / NTC probes
- High measurement accuracy and reproducibility
- Robust design
- Big, clear LCDisplay
- Calibration (1/2 points) for temperature and analogue outputs
- Intuitive menu structure
- Password protection system
- Easy mounting and start-up
- Alarm or 2-point control
- 2-,3-,4-wire connection by a Jumper

Applications

Temperature measurement, control and monitoring

- Industrial climatic installations
- Clean room, laboratory applications
- Green houses and tunnels
- Agriculture
- Measurement in liquids
- Hospitals, sport facilities
- DDC-, PLC- or discrete control systems



Technical data

Type	TempMaxx
Novasina article no.	2600284
Dimensions	183 x 110 x 50 mm
Measurement range temp. measurement PT/Ni 100	-50 ... +400°C 2-, 3- or 4-wire connection
Measurement range temp. measurement PT 1'000	-50 ... +400°C 2-, 3- or 4-wire connection
Measurement range temp. measurement Ni 1'000	-50 ... +200°C 2-, 3- or 4-wire connection
Measurement range temp. measurement Beta Therm	-20 ... +80°C +/- 0.2 K 2-wire connection
Display resolution	0,1 °C / 0,1°F
Sensor break detection	YES (display) : at 2...10V and 4...20 mA = per 0 VAC / 0 mA
Repeatability temperature	depending on probe according to DIN EN 60751 AA, A, B, 1/3B, C
Operating temperature	electronics : -10...+50°C sensor: according to spec. -50...+ 400°C
Power supply	18...35 VDC (24 VDC +/-25%) <i>without galvanic isolation</i> 50 ... 100 mA <i>depending on initial condition</i>
Outputs	<i>ranges can be scaled individually</i>
Analogue temperature	0 ... 10V, 2 ... 10V and 0 ... 20 mA, 4 ... 20 mA <i>U and I outputs are usable simultaneously</i>
Digital relay NO / NC	max. load 260 V / 2 A <i>ohmic only</i>
Accuracy	+/- 0,15 % FS <i>accuracy without sensor element over full measurement range</i>
Password protection	YES 4-digit code for all settings
Special functions	
Alarm function	Alarm : High, Low, Hysteresis, Delay, NC or NO (On/OFF)
2-point control function	Controller : Setpoint , Hysteresis , Delay , NC or NO (On/OFF)
Norm tests / storage conditions	
Electromagnetic compatibility	IEC 61000-6-2 / IEC 61000-6-4 / EN 61000-6-2 / EN 61000-6-4
IP-protection / CE-Norm	IP 41 / EN 61010-1
Storage temperature (device)	5 ... 60 °C <i>(not condensing)</i>
Storage air humidity (device)	5 ... 80% RH <i>(not condensing)</i>



Temperature probes suitable for connection

Avg temp. sensor	PT 100/1'000
Climatic air probe	PT 100/1'000 / Ni 1'000 / NTC
Surface probe	PT 100/1'000 / Ni 1'000 / NTC
Immersion probe	PT 100/1'000 / Ni 1'000
Outdoor probe	PT 100/1'000 / Ni 1'000 / NTC
Hand probe	PT 100/1'000 / Ni 1'000 / NTC
Screwed probe	PT 100/1'000
Cable probe	PT 100/1'000 / Ni 1'000 / NTC
Core probe	PT 100/1'000 / Ni 1'000
Pipe mounted sensor	PT 100/1'000 / Ni 1'000

Accessories + Spare parts

	Article no.
Housing bottom	2523135
Connector set TempMaxx 4 pcs	2600303
NTC sensor element only (air temp.)	111 7688
Surface probe PT 100	local
Immersion probe Ni 1'000	local
Avg temp. sensor PT 100 (air temp.)	local



TempMaxx dimensions

Example :

Immersion probe for liquids
PT 100 / 1'000, Ni 1'000



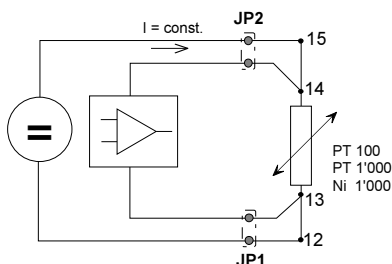
Example :

Air/liquid surface temp. probe
PT 100 / 1'000, Ni 1'000

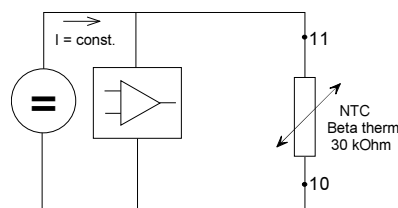


Example :

Outdoor temperature probe
PT 100 / 1'000, Ni 1'000



2-, 3- or 4-wire connection



2-wire NTC connection

Example :

Average temperature sensor
PT 100 / PT 1'000



Subject to change without notice!