Portable thermometers

Temp 70 RTD Professional

Datalogger, for Pt100 RTD probes
0,01 °C from -99,99 to +99,99 °C
0,1 °C from -200,0 to +999,9 °C

Temp 7 RTD Basic

For Pt100 RTD probes
0,1 °C from -99,9 to +199,9°C
1 °C from -200 to +999 °C

Temp 7 NTC

For NTC 30K probes
0,1 °C from -50,0 to +150,0 °C

Temp 7 K/T

For thermocouple probes type K and T
K: 0,1 °C from -99,9 to +199,9 °C
1 °C from -200 to +1350 °C
T: 0,1 °C from -99,9 to +199,9 °C
1 °C from -250 to +400 °C

Warranty 5 Years

IP56 WATERPROOF

ISO 9001 CERTIFIED

CE

The Future Starts Now

EU Designed

Thermometers for Pt100 RTD probes

The XS thermometers Pt100 RTD, are studied from an ASIC (Application Specific Integrated Circuit) microprocessor which offers numerous innovative features while maintaining, at the same time, an easy to use interface.
Good quality / price ratio, ideal for temperature measurements in the laboratory and in the field.

Temp 7 Basic For Pt100 RTD probes from -200 to + 999 °C

- *With microprocessore*
- *MIN / MAX values*
- *Measurement stability indicator*
- *Permanent memory*
- *Externally calibratable*
- *Auto power-off and hold function*
- *Low battery indicator*
- *Self diagnosis messages*
- *Splash-proof IP56 protection*
- *Protective boot in rubber with support*
- *Certifiable from National metrology center*

Splash-proof keypad

Probe connector

How to select right temperature probe for your application

On temperature measure, first selection is based at type of temperature probe. When temperature probe is selected thermometer model is linked.

Pt 100: very accurate temperature probe, with high linearity. Indicated as primary thermometer and for very accurate measure. Medium speed response. Suitable for negative value until -200°C . Suggested for laboratory application or laboratory reference.

NTC: accurate in short range of temperature: -50..+150°C. Simple and basic application as food , HAVC or general temperature measure. Medium speed response.

K thermocouple: large range of temperature applications up to 1.100°C. Most suggested for high temperature value over 300°C. Very fast response and very flexibility on construction: small size available for special application. Negative temperature value reading for short time. Suggest for all industrial application where is necessary large range of measure.

T thermocouple: short range of temperature applications up to 300°C. Very fast response and very flexibility on construction: small size available for special application. Negative temperature value reading without any problem. Suggest for all pharmaceutical and food application.

Temperature measurement in air conditioning system

Perfect for food application

How to order	
Code	Description
50011012	**Temp 7 RTD** Portable thermometer for PT 100 RTD probes, provided **without** temperature **probe.** Complete with carrying case.

Temp 70 Professional

Datalogger, for Pt100 RTD probes from -200,0 to + 999,9 °C
Resolution 0,01 °C from -99,99 to + 99,99 °C

- *Measuring range up to +999 °C, selectable resolution 0,01 and 0,1 °C*
- *Datalogger for 1000 temperature values, manual or automatic, with an interval from 1 minute to 99 hours*
- *One-point calibration with memory of date and time*
- *Dlsplay of MIN / MAX value of temperature*
- *Large backlight display, easy to read*
- *Measurement stability indicator*
- *Stability criteria of measurement: low - med - high*
- *Date and time on display*
- *USB port for connection with computer*
- *Power supply from computer or from mains with power supply included*
- *IP56 protection*
- *Rubber protection boot with holding supprt*
- *Certifiable from National metrology center*

USB port for computer connection and power supply from PC, mains power supply always included

If used in combination with PT56L 1/5 DIN probe than it's ideal as a primary thermometer

Connection with a computer

The thermometer Temp70 Pt100 datalogger is the ideal choice for fast measurements, accurate and highly precise over a wide temperature range. Robust and easy to use, the Temp70 datalogger is equipped with a large backlight LCD display for clear and well visible readings, even in low external light.

Temperature reading of liquids

Incubator temperature control

How to order	
Code	Description
50011082	**Temp 70 RTD** Portable thermometer data logger for PT 100 RTD probes, provided **without** temperature **probe**. Complete with carrying case, power supply, USB cable and software PC-link to download data.

PT 100 PROBES FOR THERMOMETERS Temp 7 RTD – Temp 70 RTD

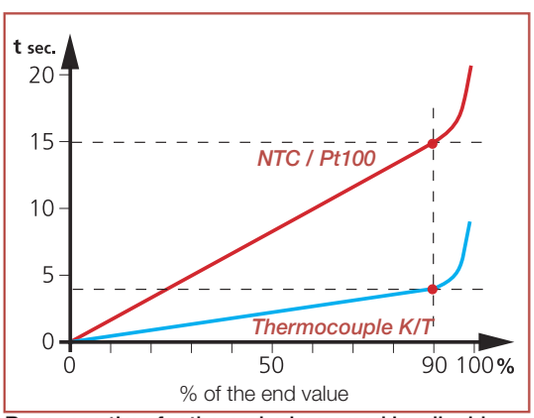
Code	Model	Design	Tip	Measuring range °C	Certification range °C	t_{90} sec.	Precision class
51000202	PT56L	200 mm Cable 1,5 m	Ø3 liquid/air	-50 +400	-50 +300	30	A
51000212	PT56C	200 mm Cable 1,5 m	Ø5 contact	-50 +400	-50 +300	120	A
51000222	PT56P	150 mm Cable 1,5 m	Ø4 penetration	-50 +400	-50 +300	60	A
51000232	PT56A	200 mm Cable 1,5 m	Ø4 air	-50 +250	-50 +150	60	A
51000242	PT56L 1/5 DIN	200 mm Cable 1,5 m	Ø3	-50 +400	-50 +300	30	1/5 DIN
51000252	PT56 TFE	100 mm Cable TEFLON/TEFLON 3 m IDEAL FOR OVENS AND FREEZERS	Ø4	-100 +300 CABLE INCLUDED	-100 +250	30	A
51000262	PT56/500	500 mm Cable 1,5 m	Ø6	-50 +400	-50 +300	60	A
51000272	PT56/1000	1000 mm Cable 1,5 m	Ø6	-50 +400	-50 +300	60	A

Other models of PT100 probes avaialabe on request

Particular of the grip

Model of the probe

Serial number of the probe essential for the certification from the National metrology center



Response time for the probe immersed in a liquid

Specifications of the precisions			
Sensor	Measuring range of temperature	Precision Class	Max tollerance refered to the temperature
Thermocouple Tipo K	-60…+1200 °C	1	±1,5 °C or 0,4% T*
Type T	-40…+350 °C	1	±0,5 °C or 0,4% T*
Thermistor NTC	+25…+85 °C -40…+125 °C	-	±0,5 °C ±1 °C
Pt100	-100 °C +0 °C +100 °C +200 °C	class A	±0,35 °C ±0,15 °C ±0,35 °C ±0,55 °C
Pt100	-100 °C +0 °C +100 °C +200 °C	class 1/5	±0,16 °C ±0,06 °C ±0,16 °C ±0,26 °C

T*=Measured Temperatura. Consider always the bigger error

Temp 7 NTC For NTC 30K thermistor probe from -50,0 °C to +150,0 °C

- *Risolution 0,1 °C*
- *With microprocessore*
- *MIN / MAX values*
- *Measurement stability indicator*
- *Permanent memory*
- *Externally calibratable*
- *Auto power-off and hold function*
- *Low battery indicator*
- *Self diagnosis messages*
- *Splash-proof IP56 protection*
- *Protective rubber boot with support*
- *Certifi ble from National metrology center*

Thermistor probe input

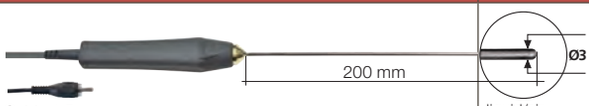
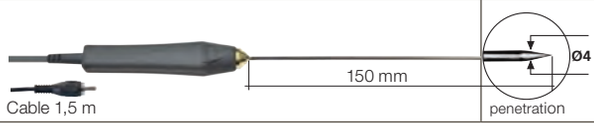
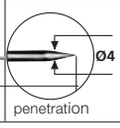
Temp 7 NTC Kit

The thermometer Temp 7 NTC is the ideal choice for fast measurements in a restricted working range. Very practical, suitable for the food industry, to control the air conditioning sector and all those basic temperature measurements where it is important to have a good quality / price ratio. The complete version including the probe for liquids and air, and the convenient carrying case is offered at an economical price.

Misurement in food industry

How to order	
Code	**Description**
50011052	**Temp 7 NTC** Portable thermometer for NTC 30K probes, provided **without** temperature **probe**. Complete with carrying case.
50011062	**Temp 7 NTC Kit** Portable thermometer for NTC 30K probes, provided **with** temperature **probe NT7L**. Complete with carrying case.

NTC 30K PROBES FOR THERMOMETER Temp 7 NTC

Code	Model	Design	Tip	Measuring range °C	Certification range °C	t_{90} sec.	Precision class
50011142	NT7L			-50 +150	-50 +150	30	–
50011122	NT7P			-50 +150	-50 +150	30	–

Temp 7 K/T For thermocouple probes types K and T from -250 °C to +1350 °C

- *Risolution 0,1/1 °C*
- *With microprocessore*
- *MIN / MAX values*
- *Measurement stability indicator*
- *Permanent memory*
- *Externally calibratable*
- *Auto power-off and hold function*
- *Low battery indicator*
- *Self diagnosis messages*
- *Splash-proof IP56 protection*
- *Protective rubber boot with support*
- *Certifi ble from National metrology center*

Thermocouple K / T probes input

Carrying case

The thermometer Temp 7 K/T for thermocouple probes K and T is a robust and easy to use instrument, thanks to its large display allows a clear reading and an accurate measurement.
The input for K and T thermocouples makes it very flexible for applications in the industrial field and in the pharmaceutical field where the type T thermocouples provide greater measurement accuracy.

Measurements in industrial field

Measurement in laboratory

How to order	
Code	**Description**
50011032	**Temp 7 K/T** Portable thermometr for thermocouple K e T probes, provided **without** temperature **probe**. Complete with carrying case.

Temp 7 TC K/T

THERMOCOUPLE TYPE K PROBES FOR THERMOMETER Temp 7 K/T

Code	Model	Design	Tip	Measuring range °C	Certification range °C	t_{90} sec.	Precision class
51000752	3K220	200 mm Cable 1,5 m	Ø2 liquid/air	-60 +600	-60+400	2	1
51000762	3K320	200 mm Cable 1,5 m	Ø3	-60 +800	-60+600	3	1
51000772	3K350	500 mm Cable 1,5 m	Ø3	-60 +800	-60+800	3	1
51000782	3K6100	1000 mm mineral oxide bendable probe Cable 1,5 m	Ø6	-60+1100	-60+1100	6	1
51000822	3K6120	1200 mm mineral oxide bendable probe Cable 1,5 m	Ø6	-60+1100	-60+1100	6	1
51000792	3K650	500 mm mineral oxide bendable probe Cable 1,5 m	Ø6	-60+1100	-60+1000	6	1
51000832	3K415P	150 mm Cable 1,5 m	Ø4 penetration	-50 +600	-50+600	3	1
51000802	3K520C	200 mm Cable 1,5 m	Ø5 contact	-60+600	-60+400	15	1
51000812	3K1200	2000 mm probe with manipulatable wire	Ø2	-60+400	-60 +300	2	1

THERMOCOUPLE TYPE T PROBES FOR THERMOMETER Temp 7 K/T
suggested for Food and Pharmaceutical industry

Code	Model	Design	Tip	Measuring range °C	Certification range °C	t_{90} sec.	Precision class
51000902	3T320	200 mm Cable 1,5 m	Ø3 liquid/air	-50 +350	-50+300	2	1
51000912	3T415	150 mm Cable 1,5 m	Ø4 penetration	-50 +350	-50+300	3	1
51000942	3T215	150 mm Cable 1,5 m	Ø2 penetration	-50 +350	-50+300	2	1
51000922	3T520C	200 mm Cable 1,5 m	Ø5 contact	-50 +350	-50+300	5	1
51000932	3T420A	200 mm Cable 1,5 m	Ø4 air	-50 +250	-50+200	3	1
51000952	3T210	100 mm Cable 2 m IDEAL FOR OVENS AND FREEZERS	Ø2,5 penetration	-50 +300 CABLE INCLUDED	-50+300	3	1

Other models of Thermocouple K / T probes avaialabe on request

Technical specifications

	Temp 7 PT100 -200...+999°C	Temp 70 PT100 Professional 0,01°C	Temp 7 NTC -50...+150°C	Temp 7 TC K/T
Model	**Temp 7 Pt100 RTD Basic**	**Temp 70 Pt100 RTD Professional**	**Temp 7 NTC**	**Temp 7 K/T**
For probes	**Pt100**	**Pt100**	**Tipo NTC 30K**	**Tipo K - T**
Measuring range	-200 ... +999 °C	-200 ... +999 °C	-50 ... +150 °C	K: -200 ... +1350 °C T: -250 ... +400 °C
Resolution	0,1 °C from -99,9 to +199,9 °C 1 °C from -200 to +999 °C	0,01°C from -99,99 to +99,99°C 0,1°C from -200,0 to +999,9°C	0,1 °C from -50,0 to +150,0 °C	K: 0,1°C from -99,9 to +199,9°C 1 °C from -200 to +1350 °C T: 0,1°C from -99,9 to +199,9°C 1 °C from -250 to +400 °C
Accuracy (meter only)	±2 °C (-200 … -100 °C) ±0,2 °C (-99,9 … +199,9 °C) ±2 °C (+200 … +850 °C)	±0,1 °C (-201 ... -100 °C) ±0,03 °C (-99,99 … +99,99 °C) ±0,1 °C (+100... +999,9 °C)	±0,2 °C (-50,0 … +150,0 °C)	For Type K - T ±0,1% of reading / ±0,4 °C (under –150 °C) ±0,25% of reading / ±1 °C (over –150 °C)
Datalogger	–	1000 values	–	–
Sampling time	–	Man/auto 1 min … 99 hours	–	–
Min/Max rading	Yes	yes	Yes	Yes
Stability indicator	Yes fix	Yes selectable (low-med-high)	Yes fix	yes fix
Hold function	Yes	Yes	Yes	Yes
Working conditions	Temp: -20 … +65 °C UR: 10 … 90% (no condensation)	Temp: -20 … +65 °C UR: 10 … 90% (no condensation)	Temp: -20 … +65 °C UR: 10 … 90% (no condensation)	Temp: -20 … +65 °C UR: 10 … 90% (no condensation)
Protection class	IP56	IP56	IP56	IP56
CE conformity	EN61326-1/A1: 1998 (EU EMC)	EN61326-1/A1: 1998 (EU EMC)	EN61326-1/A1: 1998 (EU EMC)	EN61326-1/A1: 1998 (EU EMC)
Auto power-off	After 20 min (deactivable)	After 20 min (deactivabile)	After 20 min (deactivabile)	After 20 min (deactivabile)
Display	LCD	LCD backlight	LCD	LCD
Inputs	Single 3-pin round connector	Single 3-pin round connector	Single CINCH connector	Single ANSI connector
Power supply	3 x 1,5V “AAA” alcaline	3 x 1,5V “AAA” alcaline	3 x 1,5V “AAA” alcaline	3 x 1,5V “AAA” alcaline
Batterie duration	>750 hours	>750 hours (without backlight)	>750 hours	>750 hours
Dimensions and weight instrument (without probe)	86 x 196 x 33 mm / 295 g	86 x 196 x 33 mm / 295 g	86 x 196 x 33 mm / 295 g	86 x 196 x 33 mm / 295 g
Dimensions and weight packeging (without probe)	260 x 135 x 75 mm / 580 g	260 x 135 x 75 cm / 580 g	260 x 135 x 75 cm / 580 g	260 x 135 x 75 cm / 580 g
Order code	**50011012**	**50011082**	**50011052**	**50011032**

Applications

Electroplating, Chemical industry, Food & Beverage, cooling towers and boilers, water and wastewater treatment, HVAC (Head Ventilation Air Conditioning), agriculture and gardening, Mechanical Engineering, Laboratories and Schools

TEMP 7-70 12-13 VER. 1.0a_eng

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Warranty 5 YEARS

ISO 9001 CERTIFIED

IP56 WATERPROOF

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