




**AUTOMATION SOLUTIONS**




**PRODUCT CATALOG**



MYALARM2 is a GPRS / GSM alarm control / management system for small automation, medium industrial plants and machines. The device supports datalogging, GPS tracking and dialing systems for access control and intrusion detection. Through simple commands sent by SMS text messages, calls, emails or App, the MYALARM2 can interact with remote systems to turn a boiler on / off, activate / deactivate a digital output, etc.

## DIFFERENT MODELS ACCORDING TO THE APPLICATION

<p><b>MY2B</b> VERSION <b>BASIC</b></p>   <p>Datalogger Alarms via SMS / E-mail Commands via SMS / call</p> <p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Heating Control System</li> <li>• Automatic Door Management</li> <li>• Control of Irrigation Plants</li> <li>• Timely Automation</li> <li>• Acquisition of Temperature</li> <li>• Energy Consumption Monitoring</li> <li>• Gas Leak Monitoring</li> <li>• Voltage failure control</li> </ul>	<p><b>MYS2</b> </p> <p>VERSION <b>SECURY-AUDIO</b></p>  <p>Basic version + Alarms via Audio messages Multi language Commands via tones DTMF Micro SD card included</p> <p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Access control</li> <li>• Alarms for Maintenance</li> <li>• Domotic Plant Control</li> </ul>	<p><b>MY2G</b> </p> <p>VERSION <b>GPS</b></p>  <p>Basic version + location GPS Shipping GPS location with Google Maps link Tracking function Speed alarm and virtual fence Micro Card SD Included</p> <p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Location of Vehicles and Boats</li> <li>• On-Off lights with twilight functions</li> </ul>
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	MY2B	MY2G	MY2S
			
	MyALARM2 - GSM/GPRS datalogger, standard version	MyALARM2 - GSM/GPRS datalogger, GPS version	MyALARM2 - GSM/GPRS datalogger, Security Audio version

GENERAL DATA			
Power Supply	6-15 Vdc @500mA	6-15 Vdc @500mA	6-15 Vdc @500mA
Power Consumption	3,5 W (max)	3,5 W (max)	3,5 W (max)
Protection Degree	IP20	IP20	IP20
Rechargeable battery	Li-On (1.000 mAh), lifetime 8 h	Li-On (1.000 mAh), lifetime 8 h	Li-On (1.000 mAh), lifetime 8 h
LED Status indicators	Power Supply - GSM / GPRS - Device Status	Power Supply - GSM / GPRS - Device Status	Power Supply - GSM / GPRS - Device Status
Operating Temperature	0...45 °C (best recommended*)	0...45 °C (best recommended*)	0...45 °C (best recommended*)
NTC Sensor	Built-in	Built-in	Built-in
Connections	Apring terminal clamps for 0.2 -1 mm² flexible conductors GSM antenna SMA connector GPS antenna MMCX connector Micro USB	Apring terminal clamps for 0.2 -1 mm² flexible conductors GSM antenna SMA connector GPS MMCX Antenna Micro USB	Apring terminal clamps for 0.2 -1 mm² flexible conductors GSM antenna SMA connector GPS MMCX Antenna Micro USB
Flash Memory	512 kB + 2 MB (log)	512 kB + 2 MB (log)	512 kB + 2 MB (log)
RAM	128 kB	128 kB	128 kB
SD Support	MicroSD and MicroSDHC Slot up to 32 GB	MicroSD and MicroSDHC Slot up to 32 GB	MicroSD and MicroSDHC Slot up to 32 GB
Display	Graphic LCD 32x128 pixels Display scroll button Visible area 29 x 8.6 mm	Graphic LCD 32x128 pixels Display scroll button Visible area 29 x 8.6 mm	Graphic LCD 32x128 pixels Display scroll button Visible area 29 x 8.6 mm
GSM	Quad band 850 / 900 / 1800 / 1900MHz; Push-Pull SIM connector, voice & data SIM Card support	Quad band 850 / 900 / 1800 / 1900MHz; Push-Pull SIM connector, voice & data SIM Card support	Quad band 850 / 900 / 1800 / 1900MHz; Push-Pull SIM connector, voice & data SIM Card support
Dimension	80 x 105 x 30 mm	80 x 105 x 30 mm	80 x 105 x 30 mm
Weight	150 g	150 g	150 g
Material	ABS polycarbonate	ABS polycarbonate	ABS polycarbonate
Protocols	FTP client, SMTP client, SMTPS with client SSL	FTP client, SMTP client, SMTPS with client SSL	FTP client, SMTP client, SMTPS with client SSL
Configuration	Software (EASY SETUP)	Software (EASY SETUP)	Software (EASY SETUP)
FUNCTIONS			
Datalogger	x	x	x
Multiple Commands with SMS / Email / Ring	x	x	x
DTMF Commands	-	-	x
SD card bundle	-	x	x
Voice Alarms	-	x	x
GPS	-	x	-
DIGITAL INPUT			
Channels	4	4	4
Type	REED Contact, PNP, Pulscap, dry contact	REED Contact, PNP, Pulscap, dry contact	REED Contact, PNP, Pulscap, dry contact
Max frequency	30 Hz	30 Hz	30 Hz
ANALOG INPUT			
Channels	2	2	2
Type	Current 0..20mA (max impedance 60 $\Omega$ ); Voltage 0..30 V (max impedance 100 k $\Omega$ )	Current 0..20mA (max impedance 60 $\Omega$ ); Voltage 0..30 V (max impedance 100 k $\Omega$ )	Current 0..20mA (max impedance 60 $\Omega$ ); Voltage 0..30 V (max impedance 100 k $\Omega$ )
Resolution	16 bit	16 bit	16 bit
Accuracy	0,1% f.s.	0,1% f.s.	0,1% f.s.
DIGITAL OUTPUT (OPTION)			
Channels	2	2	2
Type	SPST Relay 3 A / 250 Vac	SPST Relay 3 A / 250 Vac	SPST Relay 3 A / 250 Vac
STANDARD			
Approvals	CE	CE	CE
Norms	EN 301 511, EN301 489-1, EN301 489-7, EN60950, ETSI	EN 301 511, EN301 489-1, EN301 489-7, EN60950, ETSI	EN 301 511, EN301 489-1, EN301 489-7, EN60950, ETSI

ORDER CODES

Code	Description	Code	Description
MY2B-0-0-M-B	MyALARM2 - GSM/GPRS datalogger, standard version, clamps, blue color	MY2G-0-0-M-B-4X	MyALARM2 - GSM/GPRS datalogger, GPS version, clamps, blue color, IP66 case
MY2B-0-0-M-G	MyALARM2 - GSM/GPRS datalogger, standard version, clamps, grey color	MY2G-0-0-M-G-4X	MyALARM2 - GSM/GPRS datalogger, GPS version, clamps, grey color, IP66 case
MY2B-R-0-M-B	MyALARM2 - GSM/GPRS datalogger, standard version, relay, clamps, blue color	MY2G-R-0-M-B-4X	MyALARM2 - GSM/GPRS datalogger, GPS version, relay, clamps, blue color, IP66 case
MY2B-R-0-M-G	MyALARM2 - GSM/GPRS datalogger, standard version, relay, clamps, grey color	MY2G-R-0-M-G-4X	MyALARM2 - GSM/GPRS datalogger, GPS version, relay, clamps, grey color, IP66 case
MY2B-0-0-M-B-4X	MyALARM2 - GSM/GPRS datalogger, standard version, clamps, blue color, IP66 case	MY2S-0-0-M-B	MyALARM2 - GSM/GPRS datalogger, security audio version, clamps, blue color
MY2B-0-0-M-G-4X	MyALARM2 - GSM/GPRS datalogger, standard version, clamps, grey color, IP66 case	MY2S-0-0-M-G	MyALARM2 - GSM/GPRS datalogger, security audio version, clamps, grey color
MY2B-R-0-M-B-4X	MyALARM2 - GSM/GPRS datalogger, standard version, relay, clamps, blue color, IP66 case	MY2S-R-0-M-B	MyALARM2 - GSM/GPRS datalogger, security audio version, relay, clamps, blue color
MY2B-R-0-M-G-4X	MyALARM2 - GSM/GPRS datalogger, standard version, relay, clamps, grey color, IP66 case	MY2S-R-0-M-G	MyALARM2 - GSM/GPRS datalogger, security audio version, relay, clamps, grey color
MY2G-0-0-M-B	MyALARM2 - GSM/GPRS datalogger, GPS version, clamps, blue color	MY2S-0-0-M-B-4X	MyALARM2 - GSM/GPRS datalogger, security audio version, clamps, blue color, IP66 case
MY2G-0-0-M-G	MyALARM2 - GSM/GPRS datalogger, GPS version, clamps, grey color	MY2S-0-0-M-G-4X	MyALARM2 - GSM/GPRS datalogger, security audio version, clamps, grey color, IP66 case
MY2G-R-0-M-B	MyALARM2 - GSM/GPRS datalogger, GPS version, relay, clamps, blue color	MY2S-R-0-M-B-4X	MyALARM2 - GSM/GPRS datalogger, security audio version, relay, clamps, blue color, IP66 case
MY2G-R-0-M-G	MyALARM2 - GSM/GPRS datalogger, GPS version, relay, clamps, grey color	MY2S-R-0-M-G-4X	MyALARM2 - GSM/GPRS datalogger, security audio version, relay, clamps, grey color, IP66 case



Automation



Sensors



Industrial Computers



Data Acquisition



Test & Measurement Equipment



North America

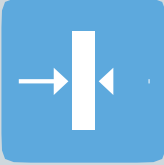









Central and South America











The K-Line compact converters from Seneca have a 6,2 mm ultra slim case. These three point galvanic isolators convert temperature, analogue, digital and serial signals. The module's main features are its compact size, installation on 35 mm DIN rails, a bus-connector power supply option, top level accuracy class, quick connection possibility thanks to the usage of spring terminals and an easy configuration in the field by means of a DIP-switch.

<p><b>DIMENSIONS</b></p>  <p>6,2 mm</p>	<p><b>ACCURACY</b></p>  <p>0,1%</p>	<p><b>CONNECTIONS</b></p>  <p>Cage clamp - Expandable bus connector on 35 mm guide (EN 60175)</p>	<p><b>ISOLATION</b></p>  <p>1,5Kv</p>
<p><b>OPERATING TEMPERATURE</b></p>  <p>-25..+65°C</p>	<p><b>POWER CONSUMPTION</b></p>  <p>&lt;25 mA</p>	<p><b>APPROVALS</b></p>  <p>CE, UL, CSA</p>	<p><b>RELIABILITY</b></p>  <p>&gt;500.000 h</p>

**ANALOG & DIGITAL CONVERTERS**

	K121	K109UI	K109S	K109LV	K111	K112
						
	Universal converter (mA, V, Ohm, RTD, TC) isolated, loop powered	DC current/voltage to current/voltage isolator converter	DC current/voltage to current/voltage isolator converter (2 wire power transducer)	DC low voltage to current/voltage isolator converter	Frequency threshold with 2 outputs	Digital sensor amplifier with 2 outputs

**GENERAL DATA**

Power supply	7..30Vdc (from loop 4..20mA)	19,2.. 30 Vdc	19,2.. 30 Vdc	19,2.. 30 Vdc	19,2.. 30 Vdc	19,2.. 30 Vdc
Side Power		Yes	Yes	Yes	Yes	Yes
Hot swapping	Yes	Yes	Yes	Yes	Yes	Yes
Current consumption	24 mA	22 mA (24 Vdc)	23 mA (24 Vdc); 45 mA (with aux power)	22 mA (24 Vdc)	< 25 mA	< 25 mA
Power consumption	<660 mW	500 mW	500 mW	500 mW	500 mW	500 mW
A/D Conversion	16 bit	14 bit	14 bit	14 bit	14 bit	14 bit
Rejection	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Settings	Software (EASY SETUP)	DIP Switches	DIP Switches	DIP Switches	DIP Switches, software	DIP Switches
Filter	Added for stable reading	Added for stable reading	Added for stable reading	Added for stable reading	Configurable	
Dimensions (w x h x d)	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm
Isolation	1,5 KVAc (3-way)	1,5 KVAc (3-way)	1,5 KVAc (3-way)	1,5 KVAc (3-way)	-	1,5 KVAc (3-way)
Isolation technique	Digital (optocoupler)	Digital (optocoupler)	Digital (optocoupler)	Digital (optocoupler)	-	Digital (optocoupler)
Data processing	32 bit floating point	32 bit floating point	32 bit floating point	32 bit floating point	32 bit floating point	32 bit floating point
Colour	Black	Black	Black	Black	Black	Black
Enclosure	PBT	PBT	PBT	PBT	PBT	PBT
Weght	45 g	45 g	45 g	45 g	45 g	45 g
Operating temperature	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C
Connections	8 Clamp terminals	Clamp terminals / bus	Clamp terminals / bus	Clamp terminals / bus	Clamp terminals / bus	Clamp terminals / bus
Protection degree	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Precision class	0,1%	0,1%	0,1%	0,1%		
Thermal drift	< 120 ppm/K	< 120 ppm/K	< 120 ppm/K	< 120 ppm/K		
Status indicators	Fault, alarm	Fault, alarm	Fault, alarm	Fault, alarm	Power, threshold, error	Power, output state
Special functions	Cold junction compensation Filter Reversed output	Root extraction Signal inversion Scale settable Linearization	Root extraction Signal inversion Scale settable Linearization	Fault configuration Filter	Frequency divider Medium value of N pulses (N <= 256)	
Approvals	CE	CE, UL-UR CSA	CE, UL-UR CSA	CE	CE	CE
Norms	EN 61000-6-4, EN 61010-6-2, EN 61010-1	EN 61000-6-4, EN 61010-6-2, EN 61010-1	EN 61000-6-4, EN 61010-6-2, EN 61010-1	EN 61000-6-4, EN 61010-6-2, EN 61010-1	EN 61000-6-4, EN 61010-6-2, EN 61010-1	EN 61000-6-4, EN 61010-6-2, EN 61010-1

**INPUT DATA**

Channels	1	1	1	1	1	1	
Type	THERMOCOUPLE J, K, R, S, T, E, B, N (EN 60584) RTD (PT100, PT500, PT1000, NI100) connection 2,3,4 wires Voltage (V) ± 30V, impedance 200 k $\wedge$ Voltage (mV) ±150 mV, impedance 10 M $\wedge$ Current: ±24 mA, impedance 40 $\wedge$ Potentiometer: 500 $\wedge$ ...10 k $\wedge$ Resistance: up to 1760 $\wedge$	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 / 0..15 / 0..30 V (inversion as well) Impedance: 110 k $\wedge$ - 325 k $\wedge$ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Impedance: 35 $\wedge$	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Impedance: 110 k $\wedge$ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Impedance: 35 $\wedge$	SHUNT Range: ±25, 50, 60, 75, 80, 100, 120, 150, 200, 250, 300, 400, 500, 1000, 2000 mV (via Dip switches)	Contact IEC 1131.2 (type 1) Namur (DIN 19234, EN 60947-5-6) NPN / PNP (12 o 22V) 2/3 wires Reed Photocell Max voltage: ±28 Vdc Frequency: Max 20 kHz, min 1 pulse every 116 minutes	Contact IEC 1131.2 (type1) Namur (DIN 19234, EN 60947-5-6) NPN / PNP (12 o 22V) 2/3 wires Reed Photocell Max frequency: 400 Hz	
Absolute value		± 32V (400mW limitation)	± 30V (limitation 400mW)	± 50 V			

**OUTPUT DATA**

Channels	1	1	1	1	2	2	
Type	CURRENT 4..20mA	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 k $\wedge$ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 $\wedge$ Protection: 25 mA	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 k $\wedge$ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 $\wedge$ Protection: 25 mA	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 k $\wedge$ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 $\wedge$ Protection: 25 mA	N.2 threshold channels, PNP, BJT, Mosfet; Max load: 60 mA / 24 Vdc	PNP e NPN simultaneous channels Max current 200 mA Max voltage 30 V (continuous), 50V (pulse)	
Response time (10-90%)	140..620ms	< 40 ms (without filter) < 88 ms (with filter)	< 40 ms (without filter) < 88 ms (with filter)	< 25 ms (without filter) < 55 ms (with filter)			

**ORDER CODES**

Code	K121	Universal isolated loop-fed converter / configured
Code	K111-C	Frequency Trip alarm unit with isolated / configured output



Automation



Sensors



Industrial Computers



Data Acquisition



Test & Measurement Equipment










North America



Central and South America

TEMPERATURE CONVERTERS

	K109PT	K109PT-HPC	K109PT1000	K120RTD	K109TC
	 				 
	Pt100 to DC current/voltage isolator converter	Pt100 to DC current/voltage isolator converter (high precision)	Pt1000 to DC current/voltage isolator converter	Pt100, Ni100 to DC current converter -Loop powered (non isolated)	TC to DC current/voltage isolator converter (with alarm)







GENERAL DATA					
Power supply	19,2..30 Vdc	19,2..30 Vdc	19,2..30 Vdc	Loop powered (5..30 Vdc)	19,2..30 Vdc
Side Power	Yes	Yes	Yes	-	Yes
Hot swapping	Yes	Yes	Yes	-	Yes
Max current consump	21..25 mA (24 Vdc)	21..25 mA (24 Vdc)	21..25 mA (24 Vdc)	21..25 mA (24 Vdc)	21..25 mA (24 Vdc)
Max power consumption	500 mW	500 mW	500 mW	500 mW	500 mW
A/D conversion	14 bit	14 bit	14 bit	14 bit	14 bit
Transmission	Optical - digital	Optical - digital	Optical - digital	Optical - digital	Optical - digital
Rejection	50 - 60 Hz (configurable)	50 - 60 Hz (configurable)	50 - 60 Hz (configurable)	50 - 60 Hz (configurable)	50 - 60 Hz (configurable)
Settings	DIP switches	DIP switches	DIP switches	DIP switches	DIP switches
Filter	Added for stable reading	Added for stable reading	Added for stable reading	Added for stable reading	Added for stable reading
Dimensions (W x H x D)	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm
Isolation	1,5 kVac (3-way)	1,5 kVac (3-way)	1,5 kVac (3-way)	-	1,5 kVac (3-way)
Isolation technique	Digital (optocoupler)	Digital (optocoupler)	Digital (optocoupler)	-	Digital (optocoupler)
Data processing	32 bit floating point	32 bit floating point	32 bit floating point	32 bit floating point	32 bit floating point
Colour	Black	Black	Black	Black	Black
Enclosure	PBT	PBT	PBT	PBT	PBT
Weight	45 g	45 g	45 g	45 g	45 g
Operating temperature	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C	-20..+65 °C
Connections	Clamp terminals / bus	Clamp terminals / bus	Clamp terminals / bus	Clamp terminals / bus	Clamp terminals / bus
Protection degree	IP20	IP20	IP20	IP20	IP20
Channels	1 input, 1 output	1 input, 1 output	1 input, 1 output	1 input, 1 output	1 input, 2 outputs
Accuracy	0,1% (max range)	0,1% (max range)	0,1%	0,1%	0,1%
Thermal drift	< 100 ppm/K	< 100 ppm/K	< 100 ppm/K	< 100 ppm/K	< 100 ppm/K
Status indicator	Fault Alarm	Fault Alarm	Fault Alarm	Fault Alarm	Fault Alarm
Embedded functions	fault and cut-off configuration, filter	fault and cut-off configuration, filter	fault and cut-off configuration, filter	RTD type / connection, filter, measure range, error, output inversion, over-range	fault and cut-off configuration, filter
Approvals	CE, UL-UR CSA	CE	CE	CE	CE, UL-UR CSA
Norms	EN 61000-6-4, EN 61000-6-2, EN 61010-1	EN 61000-6-4, EN 61000-6-2, EN 61010-1	EN 61000-6-4, EN 61000-6-2, EN 61010-1	EN 61000-6-4, EN 61000-6-2, EN 61010-1	EN 61000-6-4, EN 61000-6-2, EN 61010-1

INPUT DATA					
Type	Pt100 IEC 751 standard / EN 60751 - ITS90 Range: -150..+650 °C Min span: 50 °C Current on transmitter: 900 µA Connection: 2,3,4 wires Max cable resistance: 20 Ω	Pt100 IEC 751 standard / EN 60751 - ITS90 Range: -200..+160 °C Min span: 20 °C Current on transmitter: 900 µA Connection: 2,3,4 wires Max cable resistance: 20 Ω	Pt1000 EN 60751/A2 - ITS90 Range: -200..+210 °C Min span: 30 °C Current on transmitter: < 350 µA Connection: 2,3,4 wires Max cable resistance: 50 Ω	Pt100 EN 60751/A2 - ITS90 Range: -200..+650 °C Min span: 20 °C Connection: 2,3,4 wire Ni100 Range: -60..+250 °C Min span: 20 °C Connection: 2,3,4wires	Thermocouple Type: J,K,E,N,S,R,B,T (ITS90) Min span: 100 °C Impedance: 10 MΩ Semiconductor sold joint ADC 13 bit Precision: 0,15 °C Update: 10 s Max voltage: ±32 V

OUTPUT DATA					
Type	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 kΩ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 Ω Protection: 25 mA	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 kΩ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 Ω Protection: 25 mA	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 kΩ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 Ω Protection: 25 mA	CURRENT Range: 4..20 / 20..4 mA (2 wire) Load resistance: 1 kΩ Resolution: 0,5 µA (15 bit+sign) Protection: 30 mA	VOLTAGE Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 kΩ CURRENT Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 Ω
Static relay					Nominal voltage: 24 Vac/dc Current: 60 mA Overvoltage protection: 50 V Settable hysteresis / alarm trip < 40 ms (without filter) < 88 ms (with filter)
Response time (10-90%)	< 50 ms (without filter) < 200 ms (with filter)	< 50 ms (without filter) < 200 ms (with filter)	< 50 ms (without filter) < 200 ms (with filter)	< 220 ms (without filter) < 620 ms (with filter)	< 40 ms (without filter) < 88 ms (with filter)
A/D conversion, resolution	1 mV, 2 µA	1 mV, 2 µA	1 mV, 2 µA	1 mV, 2 µA	1 mV, 2 µA

ORDER CODES	
Code	K120RTD-C Pt100 and Ni100 to 4..20mA converter (loop-fed) - not isolated / configured

**SERIAL CONVERTERS**

	<b>K107A</b>	<b>K107B</b>	<b>K107USB</b>
	 	 	 
	<b>RS485↔RS485</b> serial isolator/repeater	<b>RS232↔RS485</b> serial isolator/converter	<b>USB↔RS485</b> serial isolator/converter

**GENERAL DATA**

Power supply	19,2..30 Vdc	19,2..30 Vdc	via USB port
Side Power	Yes	Yes	-
Hot swapping	Yes	Yes	Yes
Max current consumption	22 mA (24 Vdc)	22 mA (24 Vdc)	60 mA
Max power consumption	500 mW	500 mW	-
Rejection	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Settings	DIP switches	DIP switches	DIP switches
Filter	Added for stable reading	Added for stable reading	Added for stable reading
Dimensions (w x h x d)	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm	6,2 x 93,1 x 102,5 mm
Isolation	1,5 kVac (3-way)	1,5 kVac (3-way)	1,5 kVac (USB // RS485)
Isolation technique	Digital (optocoupler)	Digital (optocoupler)	Digital (optocoupler)
Data processing	32 bit floating point	32 bit floating point	32 bit floating point
Colour	Black	Black	Black
Enclosure	PBT	PBT	PBT
Weight	45 g	45 g	45 g
Operating temperature	-20..+65 °C	-20..+65 °C	-20..+65 °C
Connections	Clamp terminals / bus	Clamp terminals / bus	Clamp terminals / bus
Protection degree	IP20	IP20	IP20
Channels	1 input, 1 output	1 input, 1 output	1 input, 1 output
Status indicators	Power ON Data Inverted connection	Power ON Data Inverted connection	Power ON Data Inverted connection
Communication	Automatic handshake Baud rate: 1.200..115.200 bps	Automatic handshake Baud rate: 1.200..115.200 bps	
Embedded functions			Compliance to USB 1.1 and 2.0 Plug&play for WIN98, 2000 and XP Multiple connection on the same PC
Approvals	CE, UL-UR CSA	CE, UL-UR CSA	CE, UL-UR CSA
Norms	EN 61000-6-4, EN 61000-6-2, EN 61010-1	EN 61000-6-4, EN 61000-6-2, EN 61010-1	EN 61000-6-4, EN 61000-6-2, EN 61010-1

**DATA X SIDE**

Type	SERIAL RS485 Half duplex, 31 nodes, line termination, protection up to 30Vdc	SERIAL RS232, protection up to 30 Vdc	SERIAL USB interface, standard USB 1.0/ 2.0 compliance, USB A and MINI USB B connection
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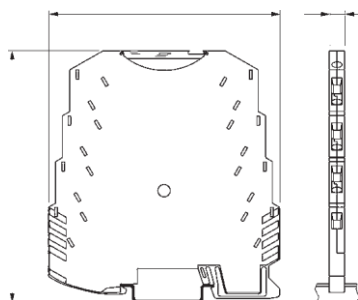
**DATA Y SIDE**

Type	SERIAL RS485 half duplex, 31 nodes, terminal, protection up to 30 Vdc	SERIAL RS485 half duplex, 31 nodes, terminal, protection up to 30 Vdc	SERIAL RS485, max 31 nodes, spring cage terminal block
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**ORDER CODES**

Code	K107A	K107B	K107USB (programming cable and CD rom included)
Accessories / Software	Page 136	Page 136	Page 136

**K-LINE MODULE DIMENSION**



Technical data, diagrams and drawings in this catalog are indicative only and not binding



Automation



Sensors



Industrial Computers



Data Acquisition



Test & Measurement Equipment







North America



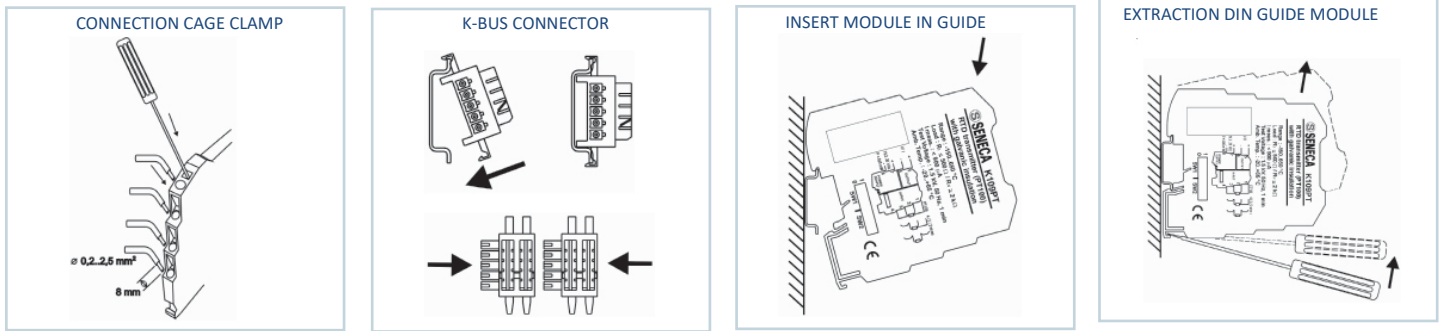
Central and South America



ACCESSORIES

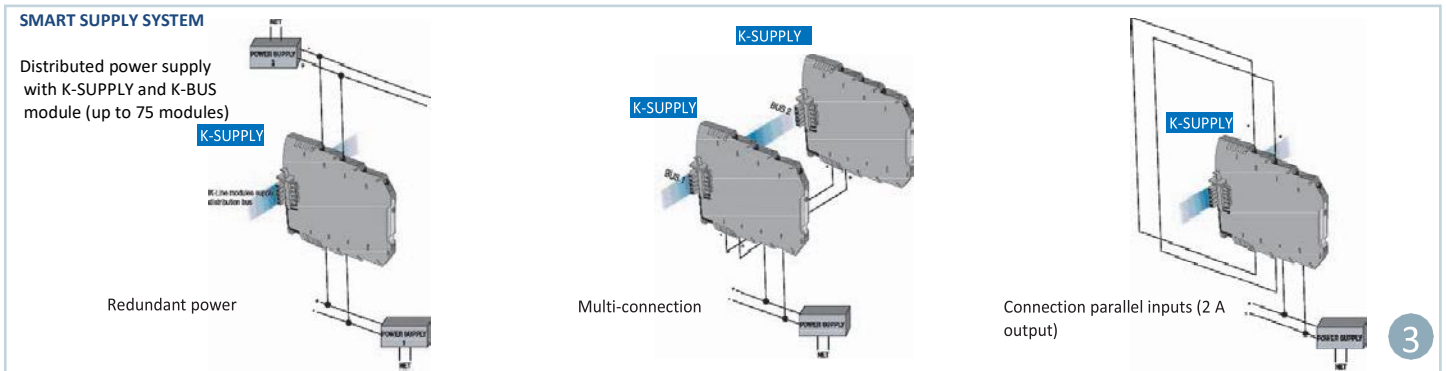
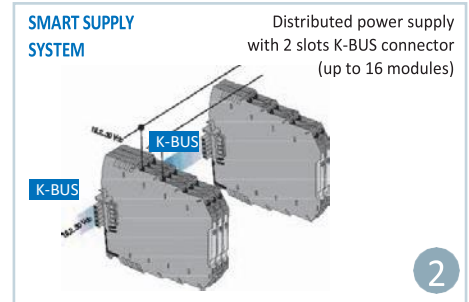
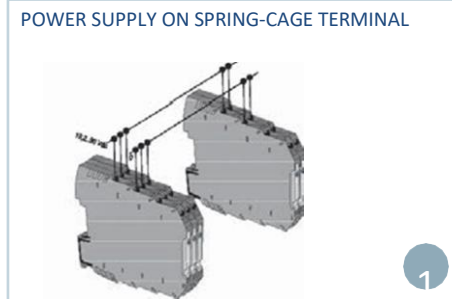
K-BUS	K-SUPPLY	EASY-USB	S117P1
 <p>Expandable power connector</p>	 <p>Redundant power module</p>	 <p>USB converter - TTL UART</p>	 <p>Serial converter RS232-USB, TTL-USB, RS485-US</p>

CONNECTION AND INSTALLATION



POWER SUPPLY TECHNIQUE









SUPPLY SYSTEM. Except from loop powered instruments which aren't bus powered, K Line signal conditioners can be powered in 3 different ways: by the springcage terminal block (24 Vdc direct from power supply) or by SMART SUPPLY system. SMART SUPPLY system is based on expandable K-BUS connector. Up to 16 devices, the distribution of power supply is possible connecting a single device at voltage source, as whole consumption doesn't exceed 400 mA. Over 16 and up to 75 devices, with maximum current consumption of 1,6 A (approx 21 mA per module), it's necessary K-SUPPLY module that gets overvoltages protections on-board.










MY Series includes hand-held transmitters that turn your Android mobile devices such as smartphones or tablets into data acquisition systems. Easily configurable via dedicated Android app, MY Series allows the display of temperature (RTD, TC) and humidity values in analog or digital format, enabling sharing of instant measurement via SMS, email and other common data platforms. MY Series is the suitable solution for professional, certified and industrial measurements in several application (machinery, environmental chambers, food storage and transport, laboratories, HVAC systems etc...) both for diagnostic purposes and environmental parameters monitoring.

 <p><b>VISUALIZING SENSOR DATA ON YOUR SMARTPHONE OR TABLET</b></p>	 <p><b>FREE APP AVAILABLE FOR ANDROID DEVICES WITH MICROUSB OTG</b></p>
 <p><b>INSTANT MEASUREMENT RECORDING &amp; SHARING VIA EMAIL, SMS, WHATSAPP, FACEBOOK, TWITTER ETC</b></p>	 <p><b>MY SERIES PROBES IS AVAILABLE IN 3 VERSIONS: RTD, THERMOCOUPLE, HUMIDITY AND TEMPERATURE</b></p>
 <p><b>VISUALIZING SENSOR DATA IN DIGITAL OR ANALOG FORMAT</b></p>	 <p><b>PAIR WITH MULTIPLE TRANSMITTERS FROM THE SAME APP</b></p>
 <p><b>QUICK SELECTION OF SCALES AND ENGINEERING UNITS</b></p>	 <p><b>M12M CONNECTOR FOR RELIABLE AND ACCURATE COUPLING WITH MEASURING ELEMENT</b></p>

**PT100 PROBES • MY-PT**

	MY-PT-150-3	MY-PT-250-2	MY-PT-150-3R
			
	PT100 handheld probe, class B, d=3 mm, L= 150 mm, round tip, M12M connector	PT100 handheld probe, class B, d=2 mm, L= 250 mm, round tip, M12M connector	PT100 handheld probe, class B, d=3 mm, L= 150 mm, sharpened tip, M12M connector

GENERAL DATA			
Type of Measurement	Temperature	Temperature	Temperature
Power Supply	By USB port	By USB port	By USB port
Operating Temperature	-20..+50 °C (handle)	-20..+50 °C (handle)	-20..+50 °C (handle)
Interface	Micro USB	Micro USB	Micro USB
Accuracy	Class B (sensor), conversion error (better than 1% measure / 0.5 °C)	Class B (sensor), conversion error (better than 1% measure / 0.5 °C)	Class B (sensor), conversion error (better than 1% measure / 0.5 °C)
Measurement Range	-30..300 °C	-30..300 °C	-30..300 °C
Response Time	15 s	15 s	15 s
Probe connector	M12	M12	M12
Configuration System	Android PIV APP by USB OTG Smartphone	Android PIV APP by USB OTG Smartphone	Android PIV APP by USB OTG Smartphone
Settings (by Android App)	Analog / Digital visualization Max / Min session recording Session reset Analog scale setting Engineering unit (K, °C, °F, °R) setting Instant measurement recording and sharing (su SMS, Email, Whatsapp)	Analog / Digital visualization Max / Min session recording Session reset Analog scale setting Engineering unit (K, °C, °F, °R) setting Instant measurement recording and sharing (su SMS, Email, Whatsapp)	Analog / Digital visualization Max / Min session recording Session reset Analog scale setting Engineering unit (K, °C, °F, °R) setting Instant measurement recording and sharing (su SMS, Email, Whatsapp)
Marking	CE	CE	CE
Norms	EN 61326, EN 61010-1	EN 61326, EN 61010-1	EN 61326, EN 61010-1
SENSOR			
Thermoelement	Pt100 ohm 0 °C, accuracy according to IEC 751	Pt100 ohm 0 °C, accuracy according to IEC 751	Pt100 ohm 0 °C, accuracy according to IEC 751
Isolation	100 M $\wedge$ at 100 Vdc	100 M $\wedge$ at 100 Vdc	100 M $\wedge$ at 100 Vdc
Electrical connection	Compensated male connector, plug-in and screw-on type, with body in moulded Nylon and M12X1 metal thred (DIN-VDE0627)	Compensated male connector, plug-in and screw-on type, with body in moulded Nylon and M12X1 metal thred (DIN-VDE0627)	Compensated male connector, plug-in and screw-on type, with body in moulded Nylon and M12X1 metal thred (DIN-VDE0627)
Protection Degree	IP67	IP67	IP67
Material	With densely packed Magnesium Oxide (MgO) insulated cable, stainless steel AISI 316 sheath	With densely packed Magnesium Oxide (MgO) insulated cable, stainless steel AISI 316 sheath	With densely packed Magnesium Oxide (MgO) insulated cable, stainless steel AISI 316 sheath
Diameter	3 mm	2 mm	3 mm
Length	150 mm	250 mm	150 mm





**ORDER CODES**

**PT100 MEASUREMENT SYSTEM**

Code	Description
<b>TRANSMITTER</b>	
MY-PT-150-3	PT100 handheld transmitter with PT-150-3-M12 probe
MY-PT-250-2	PT100 handheld transmitter with PT-250-2-M12 probe
MY-PT-150-3R	PT100 handheld transmitter with PT-150-3R-M12 probe
<b>ACCESSORIES/SPARE</b>	
PT-150-3-M12	PT100 class B, d=3 mm, L= 150 mm, M12 connector
PT-250-2-M12	PT100 classe B, d=2 mm, L= 250 mm, M12 connector
PT-150-3R-M12	PT100 classe B, d=3 mm, L= 150 mm, tapered terminal, M12 connector
<b>MEASUREMENT TOOL KIT</b>	
MY-PT-KIT	PT100 handheld transmitter with PT-150-3-M12, PT-250-3-M12, PT-150-3R-M12 probes



MY SERIES MEASUREMENT KIT

	MY-TC-250-3	MY-TC-250-1.5	MY-TC-AC	MY-UT
				
	Thermocouple type K handheld probe, d=3 mm, L=250 mm, round tip, M12M connector	Thermocouple type K handheld probe, d=1.5 mm, L=250 mm, round tip, M12M connector	Thermocouple type K handheld bow probe, M12M connector	Temperature / RH handheld probe, M12M connector

















GENERAL DATA				
Type of Measurement	Temperature	Temperature	Temperature	Temperature / Relative Humidity
Power Supply	By USB port	By USB port	By USB port	By USB port
Operating Temperature	-20..+50 °C (handle)	-20..+50 °C (handle)	-20..+50 °C (handle)	-20..+50 °C (handle)
Interface	Micro USB	Micro USB	Micro USB	Micro USB
Accuracy	Better than 1% measure / 2 °C	Better than 1% measure / 2 °C	Better than 1% measure / 2 °C	±3% UR (20..80% UR) ±5% (<20%UR, >80%UR) ±0.5 °C @ 25 °C; 1.5 °C @ -10..+60 °C
Measurement Range	0..1.150 °C	0..1.150 °C	0..1.150 °C	-40..+120 °C (Temp.) / 0..100% (UR)
Response Time	15 s	15 s	15 s	10 s
Probe connector	M12	M12	M12	M12
Configuration System	Android PIV APP by USB OTG Smartphone	Android PIV APP by USB OTG Smartphone	Android PIV APP by USB OTG Smartphone	Android PIV APP by USB OTG Smartphone
Settings (by Android App)	Analog / Digital visualization Max / Min session recording Session reset Analog scale setting Engineering unit (K, °C, °F, °R) setting Instant measurement recording and sharing (su SMS, Email, Whatsapp)	Analog / Digital visualization Max / Min session recording Session reset Analog scale setting Engineering unit (K, °C, °F, °R) setting Instant measurement recording and sharing (su SMS, Email, Whatsapp)	Analog / Digital visualization Max / Min session recording Session reset Analog scale setting Engineering unit (K, °C, °F, °R) setting Instant measurement recording and sharing (su SMS, Email, Whatsapp)	Analog / Digital visualization Max / Min session recording Session reset Analog scale setting Engineering unit (K, °C, °F, °R) setting Instant measurement recording and sharing (su SMS, Email, Whatsapp)
Marking	CE	CE	CE	CE
Norms	EN 61326, EN 61010-1	EN 61326, EN 61010-1	EN 61326, EN 61010-1	EN 61326, EN 61010-1

SENSOR				
Thermoelement	Single element thermocouple type K according to IEC 584 class 2 (ASTM E 230)	Single element thermocouple type K according to IEC 584 class 2 (ASTM E 230)	Bow thermocouple type K, compact version	Integrated capacitive temperature / relative humidity sensor
Isolation	100 M $\Lambda$ at 500 Vdc	100 M $\Lambda$ at 500 Vdc	100 M $\Lambda$ at 500 Vdc	
Electrical connection	Compensated male connector, plug-in and screw-on type, with body in moulded Nylon and M12X1 metal thred (DIN-VDE0627)	Compensated male connector, plug-in and screw-on type, with body in moulded Nylon and M12X1 metal thred (DIN-VDE0627)	Compensated male connector, plug-in and screw-on type, with body in moulded Nylon and M12X1 metal thred (DIN-VDE0627)	Compensated male connector, plug-in and screw-on type, with body in moulded Nylon and M12X1 metal thred (DIN-VDE0627)
Protection Degree	IP67	IP67		
Material	With densely packed Magnesium Oxide (MgO) insulated cable, Inconel 600 sheath	With densely packed Magnesium Oxide (MgO) insulated cable, Inconel 600 sheath	With densely packed Magnesium Oxide (MgO) insulated cable and ungrounded hot junction	Stainless steel AISI 316 S.S. (d=6 mm)
Diameter	3 mm	1,5 mm	12 mm	6 mm
Length	250 mm	250 mm	82 mm	120 mm
Bundled equipment	Thermocouple type K, L=1000 mm, wire ANSI FEP flat cable, M12M connector	Thermocouple type K, L=1000 mm, wire ANSI FEP flat cable, M12M connector	Thermocouple type K, L=1000 mm, wire ANSI FEP flat cable, M12M connector	

THERMOCOUPLE TYPE K MEASUREMENT SYSTEM	
Code	Description
<b>TRANSMITTER</b>	
MY-TC-250-3	Thermocouple handheld transmitter with TCK-250-3-M12 and TCK-W-1000-M12 probes
MY-TC-250-1.5	Thermocouple handheld transmitter with TCK-250-1,5-M12 and TCK-W-1000-M12 probes
MY-TC-AC	Thermocouple handheld transmitter with TCK-AC-M12 and TCK-W-1000-M12 probes
<b>ACCESSORIES/SPARE</b>	
TCK-250-3-M12	Thermocouple type K, d=3 mm, L=250 mm, M12 connector
TCK-250-1.5-M12	Thermocouple type K, d=1.5 mm, L=100 mm, M12 connector
TCK-W-1000-M12	Thermocouple type K, joint exposed, L=1000 mm, M12 connector
TCK-AC-M12	Thermocouple type K, bow type, M12 connector
<b>MEASUREMENT TOOL KIT</b>	
MY-TC-KIT	Thermocouple handheld transmitter with TCK-AC-M12, TCK-250-3-M12, TCK-250-1,5-M12 and TCK-W-1000-M12 probes

TEMPERATURE / RH MEASUREMENT SYSTEM	
Code	Description
<b>TRANSMITTER</b>	
MY-UT	Temperature / Relative Humidity handheld transmitter with UT-M12 probe
<b>ACCESSORIES/SPARE</b>	
UT-M12	Temperature / Relative Humidity probe, M12 connector
<b>CONFIGURATION APP</b>	
PIV-APP	App Android for handheld probes configuration (MY-PT, MY-TC, MYUT). For MicroUSB OTG smartphone

# ACCESSORIES

CODE	PICTURE	DESCRIPTION
A-169DV14		Omnidirectional thermoplastic polymer antenna with BNC male connector, length 40 cm, $\lambda / 4$ short.
A-169YAGI		Yagi antenna 3 elements in anodized aluminum with male BNC connection, dimension 99 x 99 cm and 10 m cable.
A-DIN-T201		DIN rail Plastic clip (spare) for T201 series transducers. This clip is already included in the package of each transducer of the T201 series.
A-GPS		External GPS antenna: magnetic mount and MMCX connector for MyAlarm2 MY2G device.
A-GSM		Dual band GSM external antenna, 3.2 m cable, SMA
A-GSM-DIR-5M		GSM-DECT-UMTS directive compact antenna
A-GSM-OMNIDIR		GSM-UMTS-WIFI omnidirectional antenna
A-GSM-OMNIDIR-10		GSM-UMTS-WIFI omnidirectional antenna Cable length of 10 m
ANT-LINK1-MG		Magnetic antenna with double band, 2.5 M cable, SMA connector, M 4 dbi (870-960 / 1710-1900MHZ ** 824-894 / 1710-1900MHZ)
CE-RJ45-RJ45-C		Ethernet cable (cross) (RJ45 / RJ45)
CE-RJ45-RJ45-R		Ethernet cable (right) (RJ45 / RJ45)
CODESYS		Software package for SENECA CPU CoDeSys. An installer for all software packages.
CS-DB9F-TIP		Communication cable K107B RS232 (DB9F - tips)
CS-DB9F-TIP-V		VISUAL 1, VISUAL 2, VISUAL 3 RS485 HMI serial cable (DB9F / tips)
CS-DB9M-DB9F		RS232 serial cable for programming rights (DB9M / DB9F)
CS-DB9M-DB9M		RS232 serial cable (DB9M / DB9M)



CODE	PICTURE	DESCRIPTION
CS-DB9M-MEF-1012		Communication cable in series Z-KEY (DB9M / MEF 10-12).
CS-DB9M-TIP		RM199 RS485 serial cable (DB9 male / tips)
CS-DB9M-TIP-V		VISUAL4 RS485 serial cable (DB9M / Tips)
CS-JACK-DB9F		Serial cable programming (Z109REG, Z109REG2, Z-4AI-D, Z-4TC-D, Z3AO, Z8AI, Z-8TC) (Jack / DB9F)
CS-JACK-DB9F (PM001601)		Serial cable programming (Z109REG, Z109REG2, Z-4AI-D, Z-4TC-D, Z3AO, Z8AI, Z-8TC) (Jack / DB9F)
CS-JACK-JACK		Programming cable Z109REG2 / Test - 3 (Jack / Jack)
CS-RJ10-DB9F		RS232 serial cable (RJ10 / DB9F)
CU-A-MICROB		USB-A cable connector - MicroUSB-B - 5P
CU-A-MICRO-OTG		Adapter cable OTG micro USB - USB Type A Female for communication with Android devices
CU-A-MINIB-1		USB cable -A plug Mini - B USB 5 P, 1 meter (MY2, Z-GPRS2, Z-TWS4, Z-modem, Z-miniTWS, Z-Bridge2, Z-GATEWAY, Z-miniRTU, S203TA-D, S203RC -D, Z109REGBP, Z113-1)
CU-A-MINIB-2		USB cable -A plug Mini - B USB 5 P, 2 meters (MY2, Z-GPRS2, Z-TWS4, Z-modem, Z-miniTWS, Z-Bridge2, Z-GATEWAY, Z-miniRTU, S203TA-D, S203RC -D, Z109REGBP, Z113-1)
DL-MA		IP68 multi-level input data logger
DL-MV		IP65 multi-standard input dataloggers
DL-V		IP65 multi-standard input dataloggers
KIT-USB		Programming toolkit for USB interface instruments
MSD		Micro SD memory card with SD adapter



Automation



Sensors

Industrial  
ComputersData  
AcquisitionTest & Measurement  
EquipmentNorth  
AmericaCentral and South  
America

CODE	PICTURE	DESCRIPTION
POZZ-100		Thermowell welding with 1/2 "Gas Male PT100
POZZ-150		Welding thermowell with 1/2 "Gas Male PT100, length 150mm
POZZ-200		Welding thermowell with 1/2 "Gas Male PT100, length 200mm
POZZ-250		Welding thermowell with 1/2 "Gas Male PT100, length 250 mm.
POZZ-300		Thermowell welding with 1/2 "Gas Male PT100, length 300 mm.
POZZ-50		Thermowell welding with 1/2 "Gas Male PT100, length 50mm
PT100-100		169MHz / radio modem + external antenna with 5m length cable + BNC connector with RS232 interface, standard length 100 mm.
PT100-100-MA		Thermowell with RTD Pt100 (IEC 751) / Aluminum head against interperie. Ceramic connection box. Diameter of the sheath: 6 ~ 8mm. Process connection: 1/2 g.m. Output: 4 ~ 20mA. Sheath length: 100mm. "
PT100-150		169MHz / radio modem + external antenna with 5m length cable + BNC connector with RS232 interface, standard length of 150mm.
PT100-150-MA		Standard thermometer Pt100, 150 mm long, 4-20 mA output.
PT100-200		Pt100 standard IEC 751 / Pt100 standard length 200 mm
PT100-200-MA		Pt100 standard thermometer, 200 mm long, 4-20 mA output.
PT100-250		Pt100 standard length 250 mm
PT100-250-MA		Pt100 standard length 250 mm with 4-20 mA output.
PT100-300		RTD Pt100, 300 mm long, 6mm diameter, 1/2 "NPT connection.
PT100-300-MA		Pt100 standard length 300 mm with 4-20 mA output