INOR CONVERTERS

APAQ-H ANALOGUE PROGRAMMABLE CONVERTER

Use	APAQ-H is a series of multi-range two-wire temperature converters for thermometer heads
Input	Pt100 (-HRF, -HRFX), thermocouple J, L, T, K, N (-HCF, -HCFX)
Output	4 to 20 mA
Measuring range	Adjustable; -HRF, -HRFX: 50/100/150/200/300/400/500 °C -HCF, -HCFX: 10 to 50 mV continuously
Accuracy	-HRF, -HRFX: ±0.15 % of the temperature range -HCF, -HCFX: ±0.5 % to ±1.0 % of the temperature range
Maximum operating temperature range	-40 to 85°C
Power supply	6.5 to 32 VDC (-HRF, -HCF), 8.5 to 30 VDC (-HRFX, -HCFX)

-HRFX, -HCFX: designed for explosive environments

MINIPAQ-H BASIC PROGRAMMABLE CONVERTER

Use	Basic, programmable, uninsulated, two-wire converter for thermometer heads
Input	Pt100, Pt1000, thermocouple B, E, J, L, T, K, N, R, S, U
Output	4 to 20 mA
Measuring range	Programmable
Accuracy	±0.15 %
Maximum operating temperature range	-40 to 85 °C
Power supply	8 to 36 VDC

-HX: designed for explosive environments

IPAQ-H UNIVERSAL PROGRAMMABLE CONVERTER

Use	IPAQ-H/-HX are universal insulated, two-wire, programmable converters for thermometer heads
Input	Pt100, Pt1000, potentiometer, thermocouple B, E, J, L, T, K, N, R, S, U
Output	4 to 20 mA
Measuring range	Programmable
Accuracy	±0.1 % of the temperature range
Maximum operating temperature range	-40 to 85 °C
Power supply	6.5 to 36 VDC (-H), 8.0 to 30 VDC (-HX)

-HX: designed for explosive environments

UNIVERSAL

MESO-H UNIVERSAL HART COMPATIBLE PROGRAMMABLE CONVERTER

Use	MESO-H/-HX are intelligent, universal, fully linearized and insulated two-wire converters for thermometer heads
Input	Pt100, Pt1000, thermocouple B, E, J, L, T, K, N, R, S, U
Output	4 to 20 mA
Measuring range	Programmable
Accuracy	±0.1 % of the temperature range
Maximum operating temperature range	-40 to 85 °C
Power supply	MESO-H: 10 to 42 VDC, MESO-HX: 12 to 30 VDC

MESO-HX: designed for explosive environments

HART

IPAQ-C520 UNIVERSAL PROGRAMMABLE CONVERTER

Use	IPAQ-C520/-C520X are insulated programmable converters for heads with HART 6 protocol and double input
Input	Pt100, Pt1000, potentiometer, thermocouple B, C, D, J, K, L, N, R, S, T, U
Output	HART
Measuring range	Programmable
Accuracy	±0.05 % of the temperature range, max. ±0.1 °C
Maximum operating temperature range	-40 to 85 °C
Power supply	10 to 36 V

-C520X: designed for explosive environments

HART

IPAQ-H^{PLUS} UNIVERSAL PROGRAMMABLE CONVERTER

Use	IPAQ-HPLUS/HXPLUS are efficient insulated, two-wire programmable converters for thermometer heads
Input	Pt100, potentiometer, thermocouple B, E, J, L, T, K, N, R, S, U
Output	4 to 20 mA
Measuring range	Programmable
Accuracy	±0.05 % of the temperature range
Maximum operating temperature range	-40 to 85 °C
Power supply	-HPLUS: 6.5 to 36 VDC, -HXPLUS: 8.0 to 30 VDC

-HXPLUS: designed for explosive environments

EXTREMELY FAST AND ACCURATE

PROFIPAQ-H UNIVERSAL PROFIBUS-PA CONVERTER

Use	PROFIPAQ-H/-HX are highly efficient and very resistant converters for thermometer heads
Input	Pt100, Pt1000, Ni100, Ni1000, potentiometer, thermocouple B, E, J, L, T, K, N, R, S, U
Output	Digital Profibus – up to 125 converters in one network
Measuring range	Programmable
Accuracy	Pt100: ±0.1 °C
Maximum operating temperature range	-40 to 85 °C
Power supply	PROFIPAQ-H: 9 to 32 VDC, PROFIPAQ-HX: 9 to 17.5 VDC

PROFIPAQ-HX: designed for explosive environments

PROFIBUS

PROGRAMMABLE CONVERTERS FOR LINES RS485

DESCRIPTION

The PPL100 converter is designed for converting signals from a resistant temperature sensor within the range from -55 °C to 640 °C to a figure in ASCII format.

Converter type	PPL100
Input	PT 100/3850, PT 1000/3850, Ni 100/5000 and 6180, Ni 1000/5000 and 6180 (others as well upon agreement, e.g. NTC 20K)
Output	RS485 (-55...+640 °C)
Linearization	Yes
Power supply	8 to 20 V
Accuracy	0.2 °C
Maximum operating temperature range	-25 to 85 °C

INTELLIGENT PROGRAMMABLE CONVERTERS FOR HEADS

DESCRIPTION

PP and SH1 heads are programmable converters for heads and they are designed for converting industrial signals from resistant temperature sensors (SH1, SLM) or thermocouples into a unified industrial signal of 4 to 20 mA.

Converter type	SH1	PP200	PMA300	PP300
Input	Pt 100/3850 Pt 1000/3850 Ni 100/6180 Ni 1000/6180	PT 100/3850 PT 1000/3850 Ni 100/5000 and 6180, Ni 1000/5000 and 6180	PT 100/3850 PT 1000/3850 Ni 100/5000 and 6180 Ni 1000/5000 and 6180	PT 100/3850 PT 1000/3850 Ni 100/5000 and 6180 Ni 1000/5000 and 6180 Thermocouple J, L, K, T, S, B, E...
Input connection	2 or 3-wire	2 or 3-wire	2-wire	
Output	4 to 20 mA, programmable range			
Measuring range	Random, min. 25 °C margin	Random, min. 10 °C margin	Random, min. 10 °C margin	According to the thermocouple type
Linearization	Program-controlled	Yes	Yes	Yes
Power supply	9 to 30 V	8 to 28 V on output loop	8 to 28 V on output loop	8 to 30 V on output loop
Accuracy	Max. ±(0.1 % + 0.1 °C) – four-wire sensor connection *)	0.15 %	0.15 %	0.15 %
Maximum operating temperature range	-20 to 80 °C	-25 to 80 °C	-25 to 80 °C	-25 to 80 °C

*) Errors in percentage are related to the range.

UNIVERSAL PROGRAMMABLE CONVERTERS FOR DIN RAIL MOUNTING

DESCRIPTION

Programmable measuring converters are designed for converting industrial signals from resistant temperature sensors (PP210, PSTID, SUG2) or thermocouples (PSTID, SUG2) into a unified industrial signal of 4 to 20 mA.

Converter type	PP210	PSTID	SUG_2
Input	PT 100/3850 PT 1000/3850 Ni 100/5000 and 6180 Ni 1000/5000 and 6180	PT 100/3850 PT 1000/3850 Ni 100/5000 and 6180 Ni 1000/5000 and 6180 Thermocouple J, L, K, T, S, B, E...	PT 100/3850 PT 1000/3850 Ni 100/ 6180 Ni 1000/ 6180 Thermocouple J, L, K, T, S, B, E...
Input connection	2 or 3-wire	2 or 3-wire	2 or 3-wire
Output	4 to 20 mA	4 to 20 mA	4 to 20 mA
Galvanically isolated output	No	No	Yes
Measuring range	Random, min. 10 °C margin	Random, min. range in °C according to the sensor type	Random, min. range in °C according to the sensor type
Linearization	Yes	Program-controlled	Program-controlled
Power supply	8 to 28 V	9 to 30 V	9 to 30 V
Maximum operating temperature range	-20 to 80 °C	-30 to 80 °C	-20 to 80 °C

UNIVERSAL MULTI-INPUT PROGRAMMABLE CONVERTERS WITH ETHERNET OUTPUT

DESCRIPTION

The converter is designed for converting six analogue signals into data signals, Modus TCP protocol, a physical layer of the Ethernet.

Converter type	6xS PoETH
Input	6 inputs: SS voltage, SS power, Pt 100/3850. Pt 1000/3850, Ni 100/6180, Ni 1000/6180, thermocouple J, K, T, L, E, S... (others are possible upon agreement)
Design with display	Various display regimes for measured data on the display
Output	Ethernet
Linearization	Program-controlled
Power supply	24 V or via PoE
Accuracy	According to the output signal type
Maximum operating temperature range	-20 to 60 °C

AC2NI/SXX DOUBLE TEMPERATURE TO POWER CONVERTER

DESCRIPTION

The two-channel converter is designed for converting signals of resistance temperature sensors with Ni 1000/6180 ppm elements into the unified signal of 4–20 mA.

Converter type	AC2Ni/Sxx	
Input	Up to 2 x Ni 1000/6180	
Number of channels	2	
Output	4 to 20 mA	
	S1	-30 to +60 °C
	SE*	0 to +35 °C
	S2	0 to +100 °C
	S3	0 to +150 °C
	SZ*	0 to +xxx °C
Power supply	12 to 35 VDC	
Accuracy	0.5 %	
Size h x w x d	100 x 23 x 75 mm	

PROGRAMMABLE CONVERTERS FOR CABLES

DESCRIPTION

The programmable converter is designed for converting industrial signals from resistance temperature sensors Pt 100/3850 into the unified signal of 4–20 mA. Its structure makes it suitable for connecting to cable sensors.

Input	Pt 100/3850
Input connection	3-wire
Connector	M12 4-pin
Output	4 to 20 mA
Measuring range	Programmable, max. -50 to 800 °C, min. 50 °C margin
Power supply	8.5 to 32 V
Accuracy	0.2 %
Size	Diameter 14 mm, length 55 mm
Maximum operating temperature range	-40 to 80 °C (for plastic body)