Product datasheet

Specifications





Analog IO module, TeSys island, 2 inputs, 1 output, 24VDC, Twisted shielded pairs cable

TPRAN2X1

Main

Iviairi		
Range	TeSys	
Product name	TeSys island	
Device short name	TPRAN	
Product or component type	Analog IO module	
Device presentation	IO module providing 2 analog inputs and 1 analog output Enabling advanced control functions in a TeSys island system Operational only when connected to a bus coupler TPRBC	
Function of module	Measurement of voltage, current or temperature on 2 configurable analog inputs Driving voltage or current source on 1 configurable analog output	
Product compatibility	TPRBC bus coupler	
Analogue input number	2 isolated with common point	
Analogue input type	Current 420 mA Current 020 mA Voltage 010 V Voltage - 1010 V Temperature probe - 60180 °C temperature probe: Ni 100 Temperature probe - 60180 °C temperature probe: Ni 1000 Temperature probe - 200+850 °C temperature probe: Pt 100 Temperature probe - 200600 °C temperature probe: Pt 100 Temperature probe - 200600 °C thermocouple J Thermocouple - 2001300 °C thermocouple K Thermocouple - 2001760 °C thermocouple R Thermocouple 01760 °C thermocouple S Thermocouple 01820 °C thermocouple B Thermocouple - 200400 °C thermocouple T Thermocouple - 200400 °C thermocouple N Thermocouple - 200800 °C thermocouple E Thermocouple 02315 °C thermocouple C	
Measurement accuracy	+/- 0.1 % of full scale voltage 25 °C +/- 0.1 % of full scale current 25 °C +/- 0.1 % of full scale temperature probe 25 °C +/- 0.1 % of full scale in positive temperature range thermocouple 25 °C +/- 0.4 % of full scale in negative temperature range thermocouple 25 °C	
Analogue input resolution	15 bits + sign full scale	
Input impedance	<= 50 Ohm current >= 1 MOhm voltage >= 1 MOhm thermocouple >= 1 MOhm temperature probe	
Analogue output number	1 isolated	
Analogue output type	Current 420 mA Current 020 mA Voltage 010 V Voltage - 1010 V	
Analogue output resolution	12 bits, 420 mA full scale 12 bits, 020 mA full scale 12 bits, 010 V full scale 11 bits + sign, - 1010 V full scale	

Type of cable	Twisted shielded pairs cable <30 m for input/output circuit
Local signalling	1 LED (green/red) for DS (device status)

Complementary

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[Us] rated supply voltage	24 V DC supplied by the bus coupler	
Current consumption	160 mA	
Power dissipation in W	0.5 W maximum	
[Uimp] rated impulse withstand voltage	0.5 kV conforming to IEC 61010-1	
Standards	IEC 61010-2-201 UL 61010-2-201 CSA C22.2 No 61010-2-201	
Product certifications	CSA UL EAC (pending)	
Mounting mode	Horizontal and vertical (35 mm symmetrical rail)	
Connections - terminals	Input/output circuit: removable spring terminal block 8 cable(s) 0.22.5 mm² (AWG 24AWG 14) rigid Input/output circuit: removable spring terminal block 8 cable(s) 0.22.5 mm² (AWG 24AWG 14) flexible without cable end Input/output circuit: removable spring terminal block 8 cable(s) 0.252.5 mm² (AWG 22AWG 14) flexible with cable end	
Width	25 mm	
Height	ht 118 mm	
Depth	114 mm	
Net weight	0.172 kg	

Environment

Ambient air temperature for storage	-2570 °C
Ambient air temperature for operation	-1060 °C
Relative humidity	595 %
Operating altitude	02000 m without derating
IP degree of protection	IP20
Pollution degree	2
Protective treatment	TC
Fire resistance	960 °C conforming to UL 94
Shock resistance	15 gn (duration = 11 ms) conforming to IEC 60068-2-27
Vibration resistance	1.5 mm peak to peak (f= 313 Hz) conforming to IEC 60068-2-6 1 gn (f= 13200 Hz) conforming to IEC 60068-2-6
Electromagnetic compatibility	Electrostatic discharge immunity test, level 3, 8 kV air, 6 kV contact, conforming to EN/IEC 61000-4-2 Radiated RF fields, level 3, 10 V/m, conforming to EN/IEC 61000-4-3 Fast transients immunity test, level 3, 2 kV, conforming to EN/IEC 61000-4-4 Surge immunity test (common mode), level 3, 2 kV, conforming to EN/IEC 61000-4-5

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.500 cm

Package 1 Width	13.500 cm
Package 1 Length	15.500 cm
Package 1 Weight	245.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.654 kg

Contractual warranty

Warranty 18 months



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Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

	Mercury Free	
⊘	Rohs Exemption Information	Yes
②	Halogen Free Plastic Parts Product	

Certifications & Standards

Circularity Profile	End of Life Information
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Environmental Disclosure	Product Environmental Profile
Eu Rohs Directive	Compliant with Exemptions
Reach Regulation	REACh Declaration