

Product data sheet

Specifications



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

TPRAN2X1

Product availability: Stock - Normally stocked in distribution facility

Main

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 4...20 mA Current 0...20 mA Voltage 0...10 V Voltage - 10...10 V Temperature probe - 60...180 °C Ni 100 Temperature probe - 60...180 °C Ni 1000 Temperature probe -200...+850 °C Pt 100 Temperature probe - 200...600 °C Pt 1000 Thermocouple - 200...1000 °C thermocouple J Thermocouple - 200...1300 °C thermocouple K Thermocouple 0...1760 °C thermocouple R Thermocouple 0...1760 °C thermocouple S Thermocouple 0...1820 °C thermocouple B Thermocouple - 200...400 °C thermocouple T Thermocouple - 200...1300 °C thermocouple N Thermocouple - 200...800 °C thermocouple E Thermocouple 0...2315 °C thermocouple C
Measurement accuracy	+/- 0.1 % of full scale voltage 77 °F (25 °C) +/- 0.1 % of full scale current 77 °F (25 °C) +/- 0.1 % of full scale temperature probe 77 °F (25 °C) +/- 0.1 % of full scale in positive temperature range thermocouple 77 °F (25 °C) +/- 0.4 % of full scale in negative temperature range thermocouple 77 °F (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 4...20 mA Current 0...20 mA Voltage 0...10 V Voltage - 10...10 V
Analogue output resolution	12 bits, 4...20 mA full scale 12 bits, 0...20 mA full scale 12 bits, 0...10 V full scale 11 bits + sign, - 10...10 V full scale

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Type of cable	Twisted shielded pairs cable <98.4 ft (30 m) input/output
Local signalling	1 LED (green/red) for DS (device status)

Complementary

[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 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 0.0003...0.004 in² (0.2...2.5 mm²) AWG 24...AWG 14)rigid Input/output circuit removable spring terminal block 8 0.0003...0.004 in² (0.2...2.5 mm²) AWG 24...AWG 14)flexible without cable end Input/output circuit removable spring terminal block 8 0.0004...0.004 in² (0.25...2.5 mm²) AWG 22...AWG 14)flexible with cable end
Width	1.0 in (25 mm)
Height	4.6 in (118 mm)
Depth	4.5 in (114 mm)
Product Weight	0.379 lb(US) (0.172 kg)

Environment

Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Ambient Air Temperature for Operation	14...140 °F (-10...60 °C)
Relative Humidity	5...95 %
Operating altitude	0...6561.68 ft (0...2000 m) without derating
IP degree of protection	IP20
Pollution degree	2
Protective treatment	TC
Fire resistance	1760 °F (960 °C) UL 94
Shock resistance	15 gn 11 ms) IEC 60068-2-27
Vibration resistance	1.5 mm peak to peak 3...13 Hz) IEC 60068-2-6 1 gn 13...200 Hz) 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

Ordering and shipping details

Category	US10I1222353
Discount Schedule	0112
GTIN	3606489832902

Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.559 in (6.500 cm)
Package 1 Width	5.315 in (13.500 cm)
Package 1 Length	6.102 in (15.500 cm)
Package weight(Lbs)	8.642 oz (245.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	10.260 lb(US) (4.654 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	34f67cbf-84ff-49fd-8767-065fdcc66a33
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
California proposition 65	WARNING: This product can expose you to chemicals including: Carbon black, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
Halogen content performance	Halogen free plastic parts product

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Technical Illustration

Assembly's dimensions

