

Product data sheet

Specifications



analogue input cartridge, Modicon M221, 2 temperature inputs, IO extension

TMC2TI2

Main

Range Of Product	Modicon M221
Product Or Component Type	Analogue input cartridge
Product Compatibility	Modicon M221C
Analogue Input Number	2

Complementary

Analogue Input Type	thermocouple - 200...1000 °C with thermocouple J thermocouple - 200...1300 °C with thermocouple K thermocouple 0...1760 °C with thermocouple R thermocouple 0...1760 °C with thermocouple S thermocouple 0...1820 °C with thermocouple B thermocouple - 200...400 °C with thermocouple T thermocouple - 200...1300 °C with thermocouple N thermocouple - 200...800 °C with thermocouple E thermocouple 0...2315 °C with thermocouple C Ni 100/Ni 1000 temperature probe - 60...180 °C Pt 100 temperature probe - 200...850 °C Pt 1000 temperature probe - 200...600 °C
Analogue Input Resolution	14 bits
LSb Value	0.1 °C
Sampling Duration	125 ms, analogue input type: thermocouple 250 ms, analogue input type: temperature probe
Absolute Accuracy Error	+/- 0.1 % of full scale at 25 °C for Pt 100/Pt 1000, Ni 100/ Ni 1000 temperature probe +/- 0.4 % of full scale at 25 °C for thermocouple K - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple K 0...1300 °C +/- 0.4 % of full scale at 25 °C for thermocouple J - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple J 0...1000 °C +/- 0.4 % of full scale at 25 °C for thermocouple E - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple E 0...800 °C +/- 0.4 % of full scale at 25 °C for thermocouple T - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple T 0...400 °C +/- 0.4 % of full scale at 25 °C for thermocouple N - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple N 0...1300 °C +/- 6 °C at 25 °C for thermocouple R, S 0...200 °C +/- 0.1 % of full scale at 25 °C for thermocouple R, S 200...1760 °C +/- 0.1 % of full scale at 25 °C for thermocouple C 0...2315 °C
Temperature Drift	+/- 0.02 %FS/°C
Repeat Accuracy	+/- 0.5 %FS
Non-Linearity	+/- 0.01 %FS
Cross Talk	<= 1 LSB
Type Of Cable	Twisted shielded pairs cable
Electrical Connection	3 x 1.5 mm² 2 screw terminal blocks with pitch 3.81 mm adjustment for inputs
Maximum Cable Distance Between Devices	Twisted shielded pairs cable: <30 m for input

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

Insulation	Non-insulated between analogue input and internal logic
Height	41 mm
Depth	15 mm
Width	35 mm
Net Weight	0.015 kg
Input Impedance	>= 1 MOhm

Environment

Immunity To Microbreaks	10 ms
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Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.5 cm
Package 1 Width	7.0 cm
Package 1 Length	4.6 cm
Package 1 Weight	20.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	75
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3.324 kg
Unit Type Of Package 3	P12
Number Of Units In Package 3	2400
Package 3 Height	100 cm
Package 3 Width	125 cm
Package 3 Length	55 cm
Package 3 Weight	75 kg

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

Certifications & Standards

Reach Regulation	REACH Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov