

Product data sheet

Specifications



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

TMC2AI2

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	current 4...20 mA current 0...20 mA voltage 0...10 V
Analogue input resolution	12 bits
LSB value	2.44 mV 0...10 Vvoltage 4.88 µA 0...20 mAcurrent 3.91 µA 4...20 mAcurrent
Conversion time	20 ms
Sampling duration	10 ms
Absolute accuracy error	+/- 0.1 % of full scale at 25 °C +/- 1 % of full scale
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
Insulation	Non-insulated between analogue input and internal logic
Height	41 mm
Depth	15 mm
Width	35 mm
Net weight	0.015 kg
Permissible continuous overload	13 V, analogue input type: voltage 40 mA, analogue input type: current
Input impedance	<= 250 Ohm current >= 1 MOhm voltage

Environment

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

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	3.594 cm
Package 1 Width	4.692 cm
Package 1 Length	7.059 cm
Package 1 Weight	30.0 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	3.31 kg
Unit Type of Package 3	P12
Number of Units in Package 3	2400
Package 3 Height	75 cm
Package 3 Width	120 cm
Package 3 Length	80 cm
Package 3 Weight	111 kg

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	No
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	963017c2-0ee7-421a-b0fc-ceb5386b4916
REACH Regulation	REACH Declaration
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
PVC free	Yes

Use Again

Repack and remanufacture	
End of life manual availability	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