## Product data sheet

Specifications





# analog input module, Modicon TM3, 4 inputs, screw, 24V DC

TM3AI4

Product availability: Stock - Normally stocked in distribution facility

## Price\*: 219.00 USD

## Main

Range Of Product	Modicon TM3
Product Or Component Type	Analog input module
Range Compatibility	Modicon M221
	Modicon M241
	Modicon M251
	Modicon M262
Analogue Input Number	4
Analogue Input Type	current 420 mA
	current 020 mA
	voltage 010 V
	voltage - 1010 V
	-

## Complementary

Analogue Input Resolution	12 bits 11 bits + sign
Permissible Continuous Overload	13 V voltage 40 mA current
Input Impedance	<= 50 Ohm current >= 1 MOhm voltage
Lsb Value	2.44 mV 010 V voltage 4.88 mV - 1010 V voltage 4.88 μA 020 mA current 3.91 μA 420 mA current
Conversion Time	1 ms + 1 ms per channel + 1 controller cycle time
Sampling Duration	1 ms
Absolute Accuracy Error	+/- 0.1 % of full scale at 77 °F (25 °C) +/- 1 % of full scale
Temperature Drift	+/- 0.006 %FS/°C
Repeat Accuracy	+/-0.5 %FS
Non-Linearity	+/- 0.2 %FS
Cross Talk	<= 1 LSB
[Us] Rated Supply Voltage	24 V DC
Supply Voltage Limits	20.428.8 V
Type Of Cable	Twisted shielded pairs cable <98.43 ft (30 m) input
Current Consumption	35 mA 5 V DC via bus connector no load 45 mA 5 V DC via bus connector full load 30 mA 24 V DC via external supply
Local Signalling	for PWR 1 LED (green)

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

Electrical Connection	10 x 1.5 mm <sup>2</sup> removable screw terminal block pitch 3.81 mm for inputs and supply $10 \text{ x } 1.5 \text{ mm}^2$ removable screw terminal block pitch 3.81 mm for inputs
Insulation	Between input and supply 1500 V AC Between input and internal logic 500 V AC
Marking	CE
Surge Withstand	1 kV power supply common mode IEC 61000-4-5 0.5 kV power supply differential mode IEC 61000-4-5 1 kV input common mode IEC 61000-4-5
Mounting Support	Top hat type TH35-15 rail IEC 60715 Top hat type TH35-7.5 rail IEC 60715 plate or panel with fixing kit
Height	3.54 in (90 mm)
Depth	2.76 in (70 mm)
Width	0.93 in (23.6 mm)
Net Weight	0.24 lb(US) (0.11 kg)

## Environment

Standards	IEC 61131-2
Product Certifications	CE UKCA RCM EAC cULus cULus HazLoc
Resistance To Electrostatic Discharge	8 kV in air IEC 61000-4-2 4 kV on contact IEC 61000-4-2
Resistance To Electromagnetic Fields	9.14 V/m (10 V/m) 80 MHz1 GHz IEC 61000-4-3 2.74 V/m (3 V/m) 1.4 GHz2 GHz IEC 61000-4-3 0.91 V/m (1 V/m) 2 GHz3 GHz IEC 61000-4-3
Resistance To Magnetic Fields	98.43 A/m (30 A/m) IEC 61000-4-8
Resistance To Fast Transients	1 kV IEC 61000-4-4 I/O)
Resistance To Conducted Disturbances	10 V 0.1580 MHz IEC 61000-4-6 3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) Marine specification (LR, ABS, DNV, GL)
Electromagnetic Emission	Radiated emissions 40 dBμV/m QP class A 10 m)30…230 MHz IEC 55011 Radiated emissions 47 dBμV/m QP class A 10 m)230…1000 MHz IEC 55011
Immunity To Microbreaks	10 ms
Ambient Air Temperature For Operation	14131 °F (-1055 °C) horizontal installation 1495 °F (-1035 °C) vertical installation
Ambient Air Temperature For Storage	-13158 °F (-2570 °C)
Relative Humidity	1095 %, without condensation in operation) 1095 %, without condensation in storage)
Ip Degree Of Protection	IP20
Pollution Degree	2
Operating Altitude	06561.68 ft (02000 m)
Storage Altitude	0.009842.52 ft (03000 m)
Vibration Resistance	3.5 mm 5…8.4 Hz DIN rail 3 gn 8.4…150 Hz DIN rail
Shock Resistance	15 gn 11 ms

## Ordering and shipping details

Category	US10MSX22533
Discount Schedule	OMSX
Gtin	3606480648908
Returnability	Yes
Country Of Origin	US

## **Packing Units**

0	
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.99 in (7.585 cm)
Package 1 Width	4.17 in (10.598 cm)
Package 1 Length	5.04 in (12.814 cm)
Package 1 Weight	7.41 oz (210.0 g)
Unit Type Of Package 2	S04
Number Of Units In Package 2	42
Package 2 Height	11.81 in (30 cm)
Package 2 Width	15.75 in (40 cm)
Package 2 Length	23.62 in (60 cm)
Package 2 Weight	22.22 lb(US) (10.08 kg)
Unit Type Of Package 3	P12
Number Of Units In Package 3	504
Package 3 Height	41.34 in (105 cm)
Package 3 Width	47.24 in (120 cm)
Package 3 Length	31.50 in (80 cm)
Package 3 Weight	291.01 lb(US) (132 kg)

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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

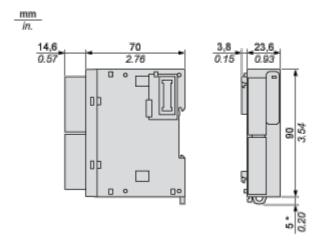
## **Certifications & Standards**

REACh Declaration
Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China RoHS declaration
Product Environmental Profile
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
End of Life Information
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

## Product data sheet

#### **Dimensions Drawings**

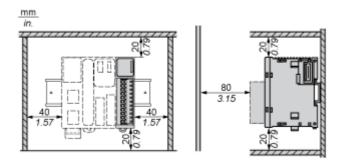
#### Dimensions



(\*) 8.5 mm/0.33 in when the clamp is pulled out.

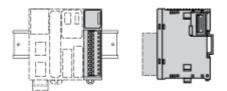
Mounting and Clearance

## Spacing Requirements



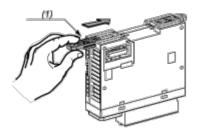
6

#### Mounting on a Rail



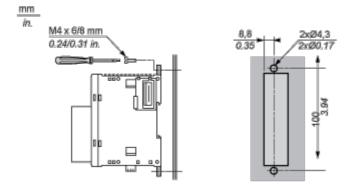
#### **Incorrect Mounting**





(1) Install a mounting strip

#### Mounting Hole Layout

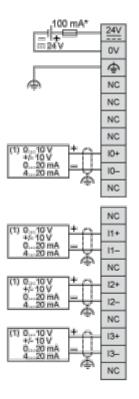


## Product data sheet

Connections and Schema

## Analogue Input Module

#### Wiring Diagram (Current / Voltage)



- (\*) Type T fuse
- (1) Current/Voltage analog output device