

Product datasheet

Specifications



Analog input module. Modicon
TM5. 4I. +/-10 V/0...20 mA/4...20
mA. 12 bits

TM5SAI4L

Price: 14,342.62 ZAR

Main

Range Of Product	Modicon TM5
Product Or Component Type	Analog input module
Analogue Input Number	4
Analogue Input Type	voltage +/- 10 V differential current 0...20 mA/4...20 mA differential
Analogue Input Resolution	12 bits + sign +/- 10 V 12 bits 0...20 mA/4...20 mA

Complementary

Range Compatibility	Modicon M258 Modicon LMC058
Product Compatibility	Motion controller Logic controller
Measurement Resolution	2.441 mV, +/- 10 V 4.883 µA, 0...20 mA/4...20 mA
Colour	White
Input Impedance	>= 20 mOhm voltage
Load Impedance Ohmic	<= 400 Ohm (current)
Sampling Duration	1 ms, analogue input type: all inputs with filtering 400 µs, analogue input type: all inputs without filtering
Measurement Error	< 0.08 % of full scale +/- 10 V +/- 10 V at 25 °C < 0.08 % of full scale 0...20 mA/4...20 mA at 25 °C
Temperature Coefficient	+/- 0.009 %FS/°C, analogue input type: current +/- 0.006 %FS/°C, analogue input type: voltage
Non-Linearity	< 0.025 %FS, analogue input type: voltage < 0.05 %FS, analogue input type: current
Type Of Cable	Shielded cable
Isolation	No insulation between channels 500 Vrms AC insulation between channel and bus
Supply	Internal
[Us] Rated Supply Voltage	24 V DC -15...20 %
Common Mode Rejection	> 70 dB
Local Signalling	1 LED green for power supply 1 LED red for power supply 4 LEDs green for input status
Current Consumption	2 mA at 5 V DC bus 46 mA at 24 V DC input/output
Maximum Power Dissipation In W	1.11 W

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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

Marking	CE
Net Weight	0.025 kg

Environment

Standards	CSA C22.2 No 213 IEC 61131-2 UL 508 CSA C22.2 No 142
Product Certifications	CSA cULus GOST-R C-Tick
Ambient Air Temperature For Operation	0...55 °C without derating (horizontal installation) 0...60 °C with derating factor (horizontal installation) 0...50 °C (vertical installation)
Ambient Air Temperature For Storage	-25...70 °C
Relative Humidity	5...95 % without condensation
Ip Degree Of Protection	IP20 conforming to IEC 61131-2
Pollution Degree	2 conforming to IEC 60664
Operating Altitude	0...2000 m
Storage Altitude	0...3000 m
Vibration Resistance	1 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.4 Hz on DIN rail
Shock Resistance	15 gn for 11 ms
Resistance To Electrostatic Discharge	4 kV on contact conforming to IEC 61000-4-2 8 kV in air conforming to IEC 61000-4-2
Resistance To Electromagnetic Fields	1 V/m 2...2.7 GHz conforming to IEC 61000-4-3 10 V/m 80...2000 MHz conforming to IEC 61000-4-3
Resistance To Fast Transients	1 kV (I/O) conforming to IEC 61000-4-4 1 kV (shielded cable) conforming to IEC 61000-4-4 2 kV (power lines) conforming to IEC 61000-4-4
Surge Withstand	0.5 kV differential mode conforming to IEC 61000-4-5 1 kV common mode conforming to IEC 61000-4-5
Electromagnetic Compatibility	EN/IEC 61000-4-6
Disturbance Radiated/Conducted	CISPR 11

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.100 cm
Package 1 Width	6.100 cm
Package 1 Length	10.800 cm
Package 1 Weight	39.000 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	97
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm

Package 2 Weight	4.168 kg
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Contractual warranty

Warranty	18 months
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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

✓	Reach Free Of Svhc	
✓	Toxic Heavy Metal Free	
✓	Mercury Free	
✓	Rohs Exemption Information	Yes
✓	Pvc Free	

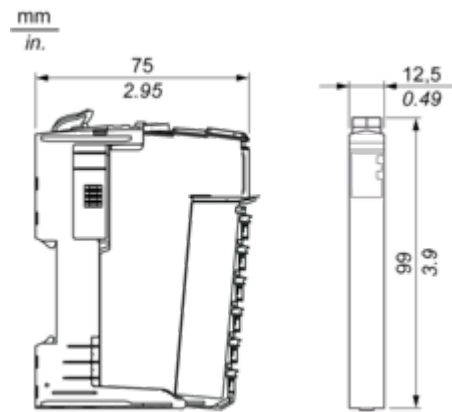
Certifications & Standards

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
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Dimensions Drawings

TM5 Slice

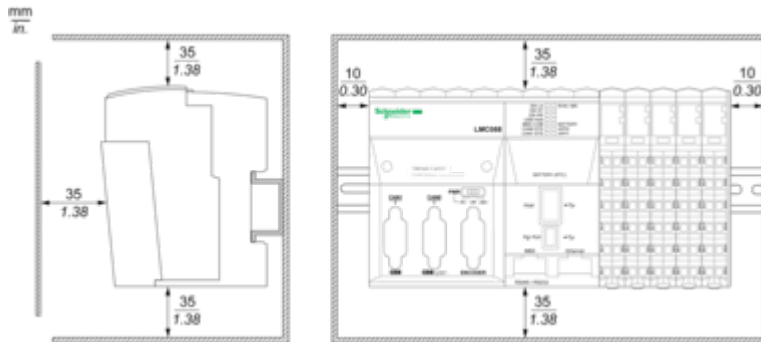
Dimensions



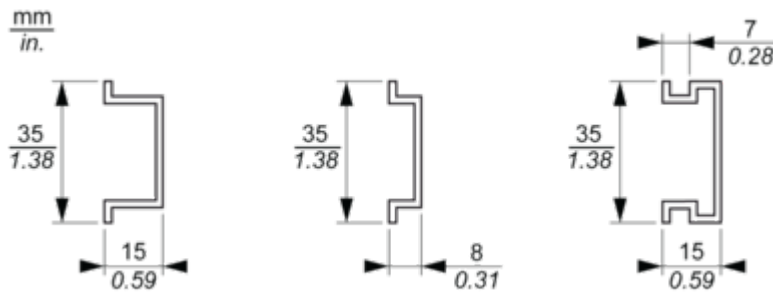
Mounting and Clearance

TM5 System

Spacing Requirements



Mounting on a DIN Rail



Connections and Schema

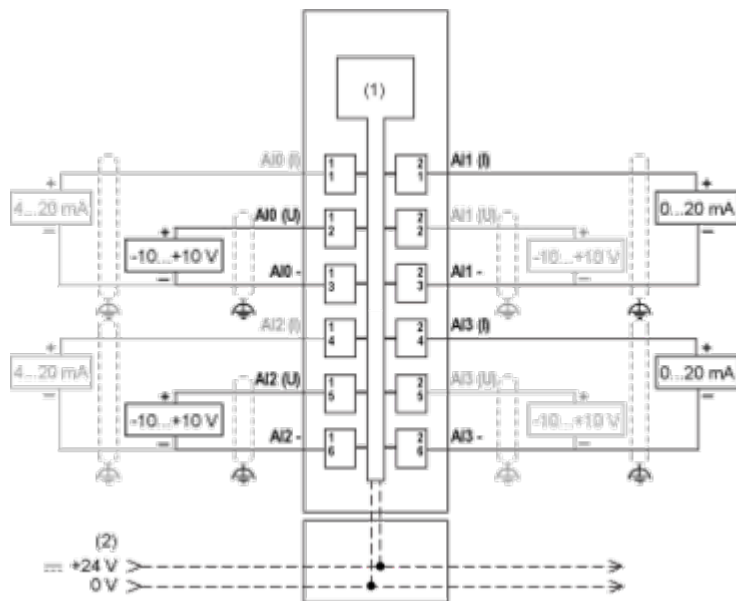
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

				
mm ²	0,08...2,5	0,25...2,5	0,25...1,5	2 x 0,25...2 x 0,75
AWG	28...14	24...14	24...16	2 x 24...2 x 18

Electronic Module 4AI $\pm 10V/0-20mA/4-20mA$ 12 Bits

Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (I) Current
- (U) Voltage