

# Product datasheet

## Characteristics

# TM2AMI4LT

analog input module M238- 4 inputs  
voltage/current/temperature- non differential



## Main

Range of product	Modicon M238 logic controller
Product or component type	Analog input module
Analogue input number	4
Analogue input type	Current 4...20 mA non differential Voltage 0...10 V non differential Temperature probe - 200...600 °C Pt 100/Pt 1000 non differential Temperature probe - 50...150 °C Ni 100/Ni 1000 non differential
Cross talk	<= 1 LSB

## Complementary

Range compatibility	Advantys OTB Twido
Analogue input resolution	12 bits
LSB value	2.5 mV voltage voltage 4.8 µA current current 0.2 °C temperature probe Pt 100/Pt 1000 0.05 °C temperature probe Ni 100/Ni 1000
Permissible continuous overload	13 V voltage 40 mA current
Input impedance	>= 10 kOhm temperature probe 10 kOhm voltage 470 Ohm current
Sampling duration	<= 160 ms
Acquisition period	160 ms per channel + 1 controller cycle time voltage/current 320 ms per channel + 1 controller cycle time temperature probe
Measurement error	+/- 0.4 % of full scale Pt 100/Pt 1000, Ni 100/ Ni 1000 25 °C +/- 0.2 % of full scale 0...10 V 0...10 V 25 °C +/- 0.2 % of full scale 4...20 mA 4...20 mA 25 °C
Temperature coefficient	+/- 0.004 %FS/°C temperature probe +/- 0.009 %FS/°C current +/- 0.009 %FS/°C voltage
Repeat accuracy	+/- 0.1 %FS
Non-linearity	+/- 0.02 %FS
Total error	+/- 0.5 %FS
Type of cable	Shielded cable
Insulation between channel and internal logic	Photocoupler
Supply	External supply
[Us] rated supply voltage	24 V DC
Supply voltage limits	20.4...28.8 V
Electrical connection	1 removable screw terminal block
Current consumption	50 mA 5 V DC internal 60 mA 24 V DC external
Product weight	0.085 kg

## Environment

Dielectric strength	2500 V between the I/O and internal logic
Width	23.5 mm
Depth	70 mm

Height

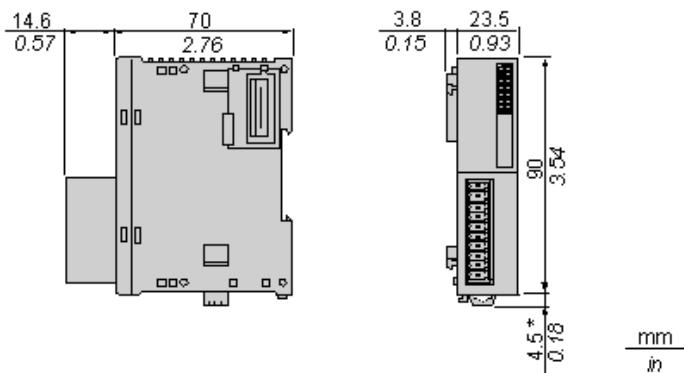
90 mm

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0839 - Schneider Electric declaration of conformity
Product environmental profile	Available
Product end of life instructions	Available

## Analog Input Module (4-channel, Voltage/Current/Temperature)

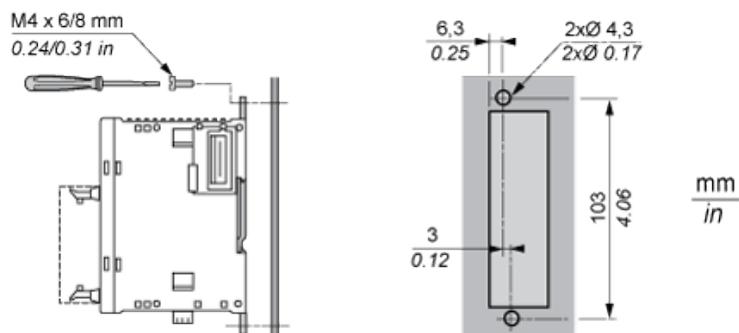
### Dimensions



NOTE: \* 8.5 mm (0.33 in) when the clip-on lock is pulled out.

### Module Mounting on a Panel Surface

#### Mounting Hole Layout



### Wiring Requirements

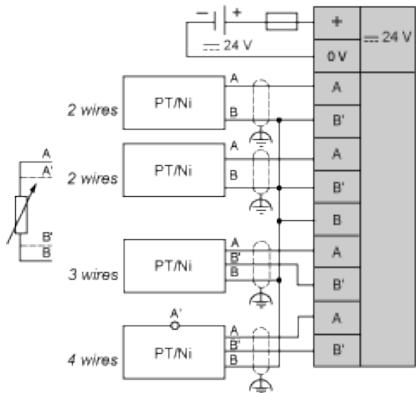
#### Cable Types and Wire Sizes for Removable Screw Terminal Block

9 Ø 3.5 mm in.	0.35 mm² AWG 26...16	0.25...0.5 0.25...1.5 24...20	0.25...1.5 24...16	0.14...0.5 0.14...0.75 26...20	0.14...0.75 0.14...0.5 26...18	0.25...0.34 0.25...0.34 24...22	0.5 20

## Analog Input Module (4-channel, Voltage/Current/Temperature)

### Wiring Diagrams

Inputs configured for measuring temperature



Inputs configured for measuring voltage/current

