

Product data sheet

Characteristics

TM2ALM3LT

analog input/output module M238 - 2 inputs thermocouple/temp low level- 1 output

Product availability: Stock - Normally stocked in distribution facility
Price*: 483.00 USD



Main

Commercial Status	Commercialised
Range of product	Modicon M238 logic controller
Product or component type	Input/Output analog module
Analogue input number	2
Input level	Low level
Analogue input type	Thermocouple 0...400 °C thermocouple T differential Thermocouple 0...1300 °C thermocouple K differential Thermocouple 0...1200 °C thermocouple J differential Temperature probe - 100...500 °C 3-wire Pt probe differential
Analogue output number	1
Analogue output type	Voltage 0...10 V Current 4...20 mA
Cross talk	<= 2 LSB

Complementary

Range compatibility	Advantys OTB Twido
Analogue input resolution	12 bits
Analogue output resolution	12 bits
LSB value	0.15 °C temperature probe 0.1 °C thermocouple 4.8 µA current current 2.5 mV voltage voltage
Input impedance	>= 1 MΩ
Load type	Resistive
Load impedance ohmic	>= 2000 Ohm voltage <= 300 Ohm current
Stabilisation time	20 ms
Conversion time	20 ms + 1 controller cycle time
Sampling duration	<= 60 ms thermocouple <= 20 ms temperature probe
Acquisition period	80 ms per channel + 1 controller cycle time 60 ms per channel + 1 controller cycle time thermocouple
Measurement error	0.2 % of full scale +/- 4 °C 0...400 °C thermocouple T 25 °C 0.2 % of full scale +/- 4 °C 0...1300 °C thermocouple K 25 °C 0.2 % of full scale +/- 4 °C 0...1200 °C thermocouple J 25 °C +/- 0.2 % of full scale 4...20 mA 4...20 mA 25 °C +/- 0.2 % of full scale 0...10 V 0...10 V 25 °C +/- 0.2 % of full scale - 100...500 °C 3-wire Pt probe 25 °C
Temperature coefficient	+/-0.015 %FS/°C 4...20 mA 4...20 mA +/-0.015 %FS/°C 0...10 V 0...10 V +/-0.006 %FS/°C 0...400 °C thermocouple T +/-0.006 %FS/°C 0...1300 °C thermocouple K +/-0.006 %FS/°C 0...1200 °C thermocouple J +/-0.006 %FS/°C - 100...500 °C 3-wire Pt probe
Repeat accuracy	+/-0.5 %FS input/output

Non-linearity	+/- 0.2 %FS voltage voltage +/- 0.2 %FS thermocouple +/- 0.2 %FS temperature probe +/- 0.2 %FS current current
Output error	+/- 1 %FS
Output ripple	<= 1 LSB
Total error	+/-1 %FS voltage voltage +/-1 %FS thermocouple +/-1 %FS temperature probe +/-1 %FS current current
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	19.2...30 V
Electrical connection	1 removable screw terminal block
Current consumption	50 mA 5 V DC internal 50 mA 24 V DC external
Product weight	0.19 lb(US) (0.085 kg)

Environment

Dielectric strength	500 V between the I/O and the external supply circuit 500 V between the I/O and internal logic 500 V between I/O channel
Width	0.93 in (23.5 mm)
Depth	2.76 in (70 mm)
Height	3.54 in (90 mm)

Ordering and shipping details

Category	22531 - PLCS, TWIDO, TWD
Discount Schedule	PC12
GTIN	00785901699231
Nbr. of units in pkg.	1
Package weight(Lbs)	0.44
Product availability	Stock - Normally stocked in distribution facility
Returnability	Y
Country of origin	JP

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS	Compliant - since 0830 -  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available  Download Product Environmental

Contractual warranty

Period	18 months
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