Product datasheet

Specifications



Discontinued

analog I/O module Twido - 24 V DC supply - 2 inputs and 1 ouput 0-10V, 4-20 mA

TWDALM3LT

Discontinued on: 31 Dec 2016

End-of-service on: 31 Dec 2021

EAN Code: 3595862043465

Main

Range of product	Twido
Product or component type	Analogue I/O module
Analogue input number	2
Analogue input type	Temperature probe temperature probe: Pt 100 3 wires differential Thermocouple -200...+760 °C thermocouple J differential Thermocouple -270...+1370 °C thermocouple K differential Thermocouple -270...+400 °C thermocouple T differential
Analogue input resolution	12 bits
Analogue output number	1
Analogue output type	Current: 4...20 mA Voltage: 0...10 V
Analogue output resolution	12 bits
I/O connection	Removable screw terminal block
Cross talk	<= 2 LSB

Complementary

Input level	Low level
LSB value	0.1 °C, analogue input type: thermocouple, thermocouple T 0.15 °K, analogue input type: temperature probe 0.3 °C, analogue input type: thermocouple, thermocouple J 0.325 °C, analogue input type: thermocouple, thermocouple K 2.5 mV voltage 4.8 µA current
Input impedance	<= 250 Ohm thermocouple <= 5 Ohm temperature probe
load type	Resistive
Load impedance ohmic	<= 300 Ohm current >= 2000 Ohm voltage
Stabilisation time	20 ms
Conversion time	20 ms + 1 controller cycle time
Sampling duration	50 ms
Sampling repetition time	50 ms
Acquisition period	500 ms + 1 controller cycle time

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

Measurement error	+/- 0.2 % of full scale 0...10 V 0...10 V at 25 °C +/- 0.2 % of full scale 4...20 mA 4...20 mA at 25 °C +/- 0.2 % of full scale Pt at 25 °C 0.2 % +/- 4 °C of full scale thermocouple J at 25 °C 0.2 % +/- 4 °C of full scale thermocouple K at 25 °C 0.2 % +/- 4 °C of full scale thermocouple T at 25 °C
Temperature coefficient	+/-0.006 %FS/°C, analogue input type: temperature probe +/-0.006 %FS/°C, analogue input type: thermocouple +/-0.015 %FS/°C, analogue output type: current +/-0.015 %FS/°C, analogue output type: voltage
Repeat accuracy	+/-0.5 %FS
Non-linearity	+/- 0.2 %FS, analogue input type: temperature probe +/- 0.2 %FS, analogue input type: thermocouple +/- 0.2 %FS, analogue output type: current +/- 0.2 %FS, analogue output type: voltage
Output error	+/- 1 %FS
Output ripple	<= 1 LSB
Total error	+/-1 %FS, analogue input type: temperature probe +/-1 %FS, analogue input type: thermocouple +/-1 %FS, analogue output type: current +/-1 %FS, analogue output type: voltage
Common mode rejection	- 50 dB
Type of cable	Shielded twisted pair
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
Current consumption	50 mA at 5 V DC 60 mA at 24 V DC
Marking	CE
Net weight	0.085 kg

Environment

Dielectric strength	500 V between the I/O and the supply circuit
Product certifications	CSA UL
IP degree of protection	IP20
Ambient air temperature for operation	0…55 °C
Ambient air temperature for storage	-25…70 °C

Contractual warranty

Warranty (in months)	18