

Main

Range of product	Twido
Product or component type	Analogue I/O module
Analogue input number	2
Analogue input type	Current 4...20 mA differential Voltage 0...10 V non 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	High level
LSB value	2.5 mV , analogue input type: voltage 2.5 mV voltage 4.8 µA , analogue input type: current 4.8 µA current
Permissible continuous overload	13 V , analogue input type: voltage 40 mA , analogue input type: current
Input impedance	≥ 1000000 Ohm voltage source ≥ 10 Ohm current source
Load type	Resistive
Load impedance ohmic	≤ 300 Ohm of current source ≥ 2000 Ohm of voltage source
Stabilisation time	20 ms
Conversion time	20 ms + 1 controller cycle time
Sampling duration	≤ 16 ms
Sampling repetition time	16 ms
Acquisition period	16 ms + 1 controller cycle time
Measurement error	+/- 0.2 % of full scale 0...10 V at 25 °C +/- 0.2 % of full scale 4...20 mA at 25 °C +/- 0.2 % of full scale 0...10 V at 25 °C +/- 0.2 % of full scale 4...20 mA at 25 °C
Temperature coefficient	+/-0.006 %FS/°C , analogue input type: voltage +/-0.006 %FS/°C , analogue input type: current +/-0.015 %FS/°C , analogue output type: voltage +/-0.015 %FS/°C , analogue output type: current
Repeat accuracy	+/-0.5 %FS
Non-linearity	+/- 0.2 %FS , analogue input type: voltage +/- 0.2 %FS , analogue input type: current +/- 0.2 %FS , analogue output type: voltage +/- 0.2 %FS , analogue output type: current
Output error	+/- 1 %FS
Output ripple	<= 1 LSB
Total error	+/-1 %FS , analogue input type: voltage +/-1 %FS , analogue input type: current +/-1 %FS , analogue output type: voltage +/-1 %FS , analogue output type: current

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
Product 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
RoHS EUR conformity date	0630
RoHS EUR status	Compliant