Product data sheet
Characteristics

BMXAMI0410
Analog isolated high level input module, Modicon X80, 4 inputs, 0 to 20mA, 4 to 20mA, 10V positive or negative



Main

Range of product	Modicon X80
Product or component type	Analog input module
Electrical connection	20 ways 1 connector
Input output isolation	Isolated
Input level	High level
Analogue input number	4
Analogue input type	Current +/- 20 mA Current 0...20 mA Current 4...20 mA Voltage +/- 10 V Voltage +/- 5 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V

Complementary

Analog/digital conversion	24 bits
Analogue input resolution	16 bits
Permitted overload on inputs	+/- 30 V +/- 10 V +/- 30 V +/- 5 V +/- 30 V 0...10 V +/- 30 V 0...5 V +/- 30 V 1...5 V +/- 90 mA +/- 20 mA +/- 90 mA 0...20 mA +/- 90 mA 4...20 mA
Input impedance	10 MOhm in voltage mode 250 Ohm + 3.6...50 Ohm internal protective resistor in current mode
Precision of internal conversion resistor	0.1 % - 15 ppm/°C
Type of filter	First order digital filtering
Fast read cycle time	1 ms + 1 ms x number of channels used
Nominal read cycle time	5 ms for 4 channels

Measurement error	<= 0.1 % of full scale +/- 10 V 0...60 °C <= 0.1 % of full scale +/- 5 V 0...60 °C <= 0.1 % of full scale 0...10 V 0...60 °C <= 0.1 % of full scale 0...5 V 0...60 °C <= 0.1 % of full scale 1...5 V 0...60 °C <= 0.3 % of full scale +/- 20 mA 0...60 °C <= 0.3 % of full scale 0...20 mA 0...60 °C <= 0.3 % of full scale 4...20 mA 0...60 °C 0.075 % of full scale +/- 10 V 25 °C 0.075 % of full scale +/- 5 V 25 °C 0.075 % of full scale 0...10 V 25 °C 0.075 % of full scale 0...5 V 25 °C 0.075 % of full scale 1...5 V 25 °C 0.15 % of full scale +/- 20 mA 25 °C 0.15 % of full scale 0...20 mA 25 °C 0.15 % of full scale 4...20 mA 25 °C
Temperature drift	15 ppm/°C +/- 10 V 15 ppm/°C +/- 5 V 15 ppm/°C 0...10 V 15 ppm/°C 0...5 V 15 ppm/°C 1...5 V 30 ppm/°C +/- 20 mA 30 ppm/°C 0...20 mA 30 ppm/°C 4...20 mA
Recalibration	Internal
Minimum crosstalk attenuation	80 DB
Common mode rejection	90 dB
Digital value format	- 32768 to + 32767 in maximum user scale +/- 10000 by default
Isolation voltage	300 V DC between channels 1400 V DC between channels and ground 1400 V DC between channels and bus
Measurement resolution	0.35 mV +/- 10 V 0.35 mV +/- 5 V 0.35 mV 0...10 V 0.35 mV 0...5 V 0.35 mV 1...5 V 0.92 µA +/- 20 mA 0.92 µA 0...20 mA 0.92 µA 4...20 mA
Maximum conversion value	+/- 11.4 V +/- 10 V +/- 11.4 V +/- 5 V +/- 11.4 V 0...10 V +/- 11.4 V 0...5 V +/- 11.4 V 1...5 V 0...30 mA +/- 20 mA 0...30 mA 0...20 mA 0...30 mA 4...20 mA
MTBF reliability	1200000 H
Operating altitude	0...2000 m 2000...5000 m with derating factor
Status LED	1 LED (green) RUN 1 LED per channel (green) channel diagnostic 1 LED (red) ERR 1 LED (red) I/O
Net weight	0.143 Kg
Power consumption in W	0.82 W 24 V DC typical 1.30 W 24 V DC maximum 0.32 W 3.3 V DC typical 0.48 W 3.3 V DC maximum
Current consumption	150 mA at 3.3 V DC 45 mA at 24 V DC

Environment

Vibration resistance	3 gn
Shock resistance	30 gn
Ambient air temperature for storage	-40…85 °C
Ambient air temperature for operation	0…60 °C
Relative humidity	5…95 % at 55 °C without condensation
IP degree of protection	IP20

Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Product certifications	CE[RETURN]RCM[RETURN]CSA[RETURN]EAC[RETURN]Merchant Navy[RETURN]UL
Standards	IEC 61010-2-201 IEC 61131-2 UL 61010-2-201 CSA C22.2 No 61010-2-201
Protective treatment	Standard version

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.600 Cm
Package 1 Width	11.100 Cm
Package 1 Length	11.700 Cm
Package 1 Weight	172.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	2.923 Kg

Offer Sustainability

Recyclability potential, in %	3
Total lifecycle Carbon footprint	81 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	21.9763878788
Carbon footprint of the manufacturing phase [A1 to A3]	22 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0224913455
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0457999515
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	58.5991843575
Carbon footprint of the use phase [B2, B3, B4, B6]	59 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.3052009697
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	81
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	48bb6c97-2415-47a4-ade7-512b1e6b32d9
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, wi
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised