



Catalog #: 1756-IF6I
ControlLogix 6 Point Isolated A/I Module

Lifecycle status: DISCONTINUED

Rockwell Automation announces that as of March 31, 2017, the ControlLogix 6 Point Isolated A/I Module will be discontinued and no longer available for sale. Customers are encouraged to remove references to the affected product(s).

Discontinued Date: March 31, 2017
Replacement Category: Functional Replacement

Technical Specifications

Electrical

Input, current	Yes
Input, voltage	Yes
Input, resistor	No
Input, resistance thermometer	No
Input, thermocouple	No
Input signal, configurable	Yes
Output, current	No
Output, voltage	No
Output signal configurable	No
Analogue inputs configurable	Yes
Analogue outputs configurable	No
Type of electric connection	Screw-/spring clamp connection
Channel bandwidth	15 Hz
Module keying	Electronic, software configurable
Module conversion method	Sigma-Delta
Offset drift	2 µV/°C
Input range	±10.5V, 0...10.5V, 0...5.25V, 0...21 mA

Data format	Integer mode (left justified, 2 s complement) IEEE 32-bit floating point
Wire category	Category: 2
Overvoltage protection	Voltage: 120V AC/DC maximum, Current: 8V AC/DC (with onboard current resistor), maximum
Common mode noise rejection	120 dB @ 60 Hz, 100 dB @ 50 Hz
Normal mode noise rejection	60 dB @ 60 Hz
Module error	0.54% of range
Gain drift with temperature	Voltage: 35 ppm/°C, 80 ppm/°C maximum, Current: 45 ppm/°C, 90 ppm/°C maximum
Module input scan time, min	25 ms minimum – floating point, 10 ms minimum – integer
Settling time	<80 ms to 5% of full scale
Total backplane power	3.7 W
Thermal dissipation	Voltage: 12.62 BTU/hr, Current: 14.32 BTU/hr
Current draw	250 mA @ 5.1V, 100 mA @ 24V
Inputs	6 individually isolated
Power dissipation	Voltage: 3.7 W, maximum, Current: 4.3 W, maximum
Resolution	16 bit, 10.5V: 343 µV/bit, 0...10.5V: 171 µV/bit, 0...5.25V: 86 µV/bit, 0...21 mA: 0.34 µA/bit
Calibrated accuracy	Better than 0.1% of range @ 25 °C (77 °F)
Open circuit detection time	Positive full scale reading within 5 s
Suitable for safety functions	No
Onboard data alarming	Yes
Scaling to engineering units	Yes
Real-time channel sampling	Yes

Environmental

Surrounding air temperature, max	60 °C
North American temperature code	T4A
Operating temperature	0 °C
Emissions	IEC 61000-6-4
ESD immunity	6 kV contact discharges, 8 kV air discharges
EFT/B immunity	±2 kV at 5 kHz on shielded signal ports
Relative humidity	5...95% noncondensing

Conducted RF immunity	10V rms with 1 kHz sine wave 80% AM from 150 kHz...80 MHz on shielded signal ports
Surge transient immunity	±2 kV line-earth (CM) on shielded signal ports
Radiated RF immunity	10 V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz, 10 V/m with 200 Hz 50% pulse 100% AM @ 900 MHz, 10 V/m with 200 Hz 50% pulse 100% AM @ 1890 MHz, 3 V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz
Nonoperating temperature	-40 °C

Mechanical

RTB keying	User-defined mechanical
Vibration	2 G @ 10...500 Hz
Shock	Operating: 30 G, Nonoperating: 30 G
Slot width	1

Certification

Calibration interval	6 months
IEC temperature code	T4

Input Specifications

Input impedance	Voltage: >10 MΩ, Current: 249 Ω
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Power

Isolation voltage	250V (continuous), basic insulation type, input channels-to-backplane, and input channel-to-channel Routine tested at 1350V AC for 2 s
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Construction

Enclosure type rating	None (open-style)
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Certifications

- Safety

This product was certified with the above certifications as of 2024-06-19. Products sold before or after this date might carry different certifications. Please review the product label to check for the certifications your specific product carries.

