Allen-Bradley 1771-IFMS

The Allen-Bradley 1771-IFMS is an intrinsically safe fast millivolt input module. This module features Eight (8) differential, low level inputs with input voltage range of 0-50 mV with resolution of 12-bit binary and accuracy 0.1% of range @ 25 ° C. Technical specifications for 1771-IFMS

Wiring Arm 1771-WG

Backplane Current 750 Miliamperes

Voltage Range 0-50 Milivolts

Channel Update/Resolution 14.5 ms/8 channels; 12 bits

Data Format +/- 32,767 Binary or +/- 9999 BDC

Number of Inputs & Outputs 8 Differential Through Intrinsically Safe Connection

Module Type Fast milivolt Input

Part Number/Catalog No. 1771-IFMS

Brand Allen-Bradley

Manufacturer Rockwell Automation / Allen-Bradley

Resolution 12-bit binary

Accuracy 0.1% of range @ 25 ° C

Linearity ±1 LSB

A/D Converter Monotonic output with no missing codes

Current Range N/A

External Power Required No

Coating Conformal Coat

Typical AC Signal Delay (Off) 24 (+/- 10) ms

Typical DC Signal Delay (Off) 20 (+/- 9) ms

Mounting Rack Mountable

UPC 10612598166999 Description

The Allen-Bradley 1771-IFMS is an analog input module that is part of the 1771 product bulletin. This module is compatible for use with PLC5 processors and features Eight (8) input channels. This module is specifically a intrinsically safe, fast millivolt input module.

The 1771-IFMS accepts input voltage signal of 0-50 mV with resolution of 12-bit binary. It has an accuracy of 0.1 % of range when operated at 25 Degree Celsius. It has a linearity of +/- 1 LSB and repeatability of +/- 1 LSB with input voltage protection of 32V. The module is designed to be operated at a maximum input voltage range of +/- 10VDC.

This analog input module comes with an internal analog to digital converter using Monotonic output with no missing codes. It has an internal scan rate of 14.5 ms for Eight (8) differential inputs without digital filtering. When wiring input devices to the 1771-IFMS, the appropriate wire size to be terminated to the module’ s 1771-WG wiring swing arm is 0.25…2.5 mm2 (22…14

AWG) solid or stranded copper wire diameter with insulation rating of 75 ° C (167 ° F), or greater, and maximum insulation of 1.2 mm (3/64 in.). Appropriate wire Torque is 0.8…1.0 Nm (7…9 lb-in).

Never install this module when the PLC5 system is under power. It does not support removal and insertion under power (RIUP). Additionally, prevent electrostatic discharge from damaging the module by observing appropriate product handling.

The input resolution of the 1771-IFMS module is 12-bit binary. The accuracy is 0.1% of the range at 25 degrees Celsius. The linearity and repeatability are both +/-1 LSB. The input overvoltage protection rating is 32 Volts. The module input impedance is 1 megaohm. The common-mode rejection is 100 dB (at 60 Hertz). The backplane current draw for the 1771-IFMS module is 0.75 Amps at +5 Volts DC. The wiring arm which is compatible with the 1771-IFMS module is the 1771-WG. The recommended range for field wiring arm screw torque is from 0.8 to 1.0 N-m. The enclosure of the 1771-IFMS module is open and the module complies with the T6 North American temperature code. The working temperature range is from 0 to 60 degrees Celsius. The relative humidity range is from 5 to 95%, non-condensing. The non-operating and operating shock ratings for the 1771-IFMS module are 30 G and 15 G, respectively. The equipment connected to the non-intrinsically safe side must not generate or use voltages that are greater than 250 Volts RMS