Analog Input Modules

F4-04AD 4-Channel Analog Input <--->	
Number of Channels	4
Input Type	Single-ended or differential Voltage or current
Input Ranges	0-5V, 1-5V, 0-10V, ±5V, ±10V 0-20mA, 4-20mA
Channels Individually Configurable	Range is selected for all channels. Each channel can be wired for voltage or current
Resolution	12 bit (0 to 4095), unipolar 13 bit (-4095 to +4095), bipolar
Input Impedance	20MΩ- minimum, voltage input 250Ω- 1/2W, ± 0.1%, 25 ppm/°C current in
Max. Continuous Overload	±50VDC, voltage input, ±45mA, current input
Recommended External Fuse	0.32A, Series 217 fast acting, current inputs
Common Mode Voltage Range	± 10V maximum
Linearity	± 0.025% of span (± 1 count max. unipolar)
Input Stability	± 1/2 count
Cross Talk	-80dB, 1/2 count maximum
Full Scale Calibration Error	± 12 counts max., voltage input ± 16 counts max., at 20.0mA current input
Offset Calibration Error	± 1 count max., voltage input ± 2 counts max., at 4.0mA current input
Maximum Inaccuracy	0.4% max. @ 77°F (25°C) 0.55% max. @ 32 to 140°F (0 to 60°C)

Conversion Time	<6mS per selected channel
Noise Rejection Ratio	Normal mode: -3dB @ 50Hz, -6 dB/octave Common mode: -70dB, DC to 12 KHz
PLC Update Rate	1 channel per scan, min., 4 per scan, max.
Digital Input Points Required	16 (X) input points (12 binary data bits, 2 channel ID bits, 1 sign, 1 broken transmitter) Optional 32 input point operation for D4-04AD compatibility mode
Terminal Type (included)	Removable (D4-16IOCON)
Base Power Required 5V	150 mA
External Power Supply	24VDC, ± 10%, 100 mA, class 2
Accuracy vs. Temperature	± 45 ppm/°C full scale calibration change (including maximum offset change of 2 counts)
Operating Temperature	32° to 140°F (0 to 60°C)
Relative Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	MIL STD 810C 514.2
Shock	MIL STD 810C 516.2
Insulation Resistance	10M, 500VDC
Noise Immunity	NEMA ICS3-304

NOTE 1: Shields should be grounded at the signal source
NOTE 2: Unused channel should be shorted for the best noise immunity
NOTE 3: When a differential input is not used, 0V should be connected to C of the channel