

Analog Input Modules

F4-16AD-2 16-Channel Analog Voltage Input <--->	
Number of Channels	16, single ended (one common)
Input Ranges	0-5V, 0-10V,
Channels Individually Configurable	No. Each channel can be configured for current or voltage but must be same range.
Resolution	12 bit (1 to 4,096)
Active Low-pass Filtering	-3dB at 20Hz, -12 dB per octave
Input Impedance	1M Ω minimum
Absolute Maximum Ratings	130VAC/100VDC,
Conversion Time	0.4ms per channel (module conversion) 2 ms per selected channel minimum (CPU)
Linearity Error (End to End)	± 2 count (0.050% of full scale) max.
Input Stability	± 1 count
Full Scale Calibration Error (Offset error not included)	± 12 counts voltage input
Offset Calibration Error	± 3 counts max., unipolar voltage input

PLC Update Rate	1 channel per scan min., 16 per scan, max.
Digital Input Points Required	16 (X) input points (12 binary data bits, 4 active channel bits,)
Base Power Required 5V	75mA
Terminal Type (included)	Removable (D4-16IOCON)
External Power Supply	21.6-26.4VDC, 100mA, class2
Operating Temperature	32° to 140°F (0 to 60°C)
Accuracy vs Temperature	± 50 ppm/°C maximum full scale (including maximum offset change of 2 counts)
Storage Temperature	-4 to 158°F (-20 to 70° 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
Noise Immunity	NEMA ICS3-304

One count in the specification table is equal to one least significant bit of the analog data value (1 in 4096).
 NOTE 1: Shields should be grounded at the signal source.
 More than one external power supply can be used (see channel 8)
 If the power supply common of an external power supply is not connected to 0VDC on the module, then the output of the external transmitter must be isolated.

