

Analog 12 Input Module

Specification	1794-IE12
Input resistance	Current input: <100 Ω Voltage input: >1 MΩ
Data format	16 bits, 2's complement
Input conversion type	Successive approximation
Input conversion rate	8.0 ms all channels
Normal mode rejection ratio	Voltage/current terminal: -3 dB @ 0.05 Hz -20 dB/decade -52 dB @ 50 Hz -54 dB @ 60 Hz Voltage/current terminal with Quick Step: -3 dB @ 1.5 Hz; -20 dB/decade -29 dB @ 50 Hz -31 dB @ 60 Hz
Step response to 63% of FS, input	Current or voltage input: 1.3 s (0.09 s with Quick Step)
Calibration	None required
Dimensions (HxWxD), approx	46 x 94 x 53 mm (1.8 x 3.7 x 2.1 in.) 94 x 94 x 69 mm (3.7 x 3.7 x 2.7 in.) installed
Resolution	16 bit unipolar 15 bit + bipolar
Accuracy	Current input: 0.1% Full Scale @ 25 °C (77 °F) Voltage input: 0.1% Full Scale @ 25 °C (77 °F) ⁽¹⁾

(1) Includes offset, gain, non-linearity, and repeatability error terms

1794-IF4I and 1794-IF4IXT Isolated Analog 4 Input Module

The 1794-IF4I and 1794-IF4IXT are input modules with channel-to-channel isolation that work with a variety of input sensors to measure input voltage in ±10V range or input current in the 0...20 mA range. Each channel is individually configurable for the desired input range. Use the 1794-IF4I or 1794-IF4IXT with 2-, 3-, and 4-wire input sensor field devices.

The 1794-IF4IXT is the extended temperature version of the 1794-IF4I module.

Settings to these parameters affect all inputs set to 150 Hz, 300 Hz, or 600 Hz. The parameters do not affect channels set at 1200 Hz.

IMPORTANT Only connect either a voltage input or a current input per channel, not both.

Isolated Analog Input Modules

Specification	1794-IF4I, 1794-IF4IXT
Voltage, input, max overload	30V, single channel, continuous
Current, input, max overload	32 mA, single channel, continuous

Isolated Analog Input Modules

Specification	1794-IF4I, 1794-IF4IXT
Input resolution	16 bits – unipolar 15 bits + sign – bipolar 0.320 μ A/cnt – unipolar 0.640 μ A/cnt – bipolar 0.156 mV/cnt – unipolar 0.313 mV/cnt – bipolar
Input resistance	Current input: <100 Ω ⁽¹⁾ Voltage input: >10 M Ω
Data format	2's complement 2's complement percent binary offset binary
Input conversion type	Sigma Delta
Input conversion rate	2.5/5.0/7.5 ms all channels
Normal mode rejection ratio	-3 dB @ 12 Hz (300 Hz conversion rate) -80.0 db @ 50 Hz (300 Hz conversion rate)
Calibration	Factory calibrated ⁽²⁾
Step response to 63% of FS, input	Current or voltage input: 1200 Hz conversion rate = 0.6 ms 600 Hz conversion rate = 6.7 ms 300 Hz conversion rate = 13.4 ms 150 Hz conversion rate = 26.7 ms
Dimensions (HxWxD), approx	46 x 94 x 53 mm (1.8 x 3.7 x 2.1 in.) 94 x 94 x 69 mm (3.7 x 3.7 x 2.7 in.) installed
Resolution	16 bit unipolar 15 bit + bipolar
Accuracy	Current input: 0.1% Full Scale @ 25 °C (77 °F) Voltage input: 0.1% Full Scale @ 25 °C (77 °F) ⁽³⁾
Temperature, operating	1794-IF4I: 0...55 °C (32...131 °F) 1794-IF4IXT: -20...70 °C (-4...185 °F)

(1) If 24V DC is removed from the module, input resistance = 10 k Ω .

(2) Can be calibrated in field when necessary.

(3) Includes offset, gain, non-linearity, and repeatability error terms