

FLEX IO™

1794sc-IF8lu

8-Channel Universal Isolated Analog Input Module



The 1794sc-IF8lu Input Module provides full isolated, universal, analog capability for noisy environments in one I/O module. The 1794sc-IF8lu module can replace analog input, thermocouple, and resistance/RTD modules without compromising performance or price.:.

- Eight channels of voltage, current, or three thermocouple, or two RTD/resistance or 4 RTD/resistance (3- or 4-wire).
- 28 input types.
- Use any combination of input types at one time.
- Accuracy comparable with dedicated analog modules.
- Supports multiple thermocouple and RTD input types.
- Individually programmable input type, open circuit detection, and high and low range alarms for each channel.
- Easy to configure using ladder register settings or RSLogix programming software.
- Channel-selectable filtering for fastest analog update time and noise rejection.
- Cold junction compensation included for thermocouples.

1794sc-IF8IU Specifications

Input Types	8 V, C, TC, RTD/Res
Input Ranges:	
Thermocouple	J, K, T, E, R, B, S, N, C
RTD	T385/3916, Ni618/672, NiFe518, Cu426
Resistance	0-150, 0-1000, 0-3000 ohms
Current	0-20 mA, 4-20 mA
Voltage	±50 mV, ±100 mV, 0-5 V, 1-5 V, 0-10 V, ±10 V
Resolution	16 bits
Advanced features	6 filter frequencies (individually selectable by channel)
Update Times (sec) *	
8-Channel Sample Time (sec)	4.17Hz 10 Hz 16.7 Hz 19.6 Hz 62 Hz 470 Hz
*with TC, update times may be longer	0.30 0.63 0.53 0.15 0.09 0.07
Electrical Isolation (continuous)	120 VAC channel-to-channel isolation 120 VAC field-wiring-to-backplane 120 VAC field-wring-to-chassis-ground
Input Impedance	Greater than 1 Mohm thermocouple, voltage, RTD Less than 250 ohm, current
Input Protection	
Voltage	+24 VDC continuous
Current	±7.8 VDC continuous
Input Overcurrent Protection	31 mA continuous
Backplane Current Required	80 mA maximum at 5 V; 240 mA at 24 V maximum (19.1 VDC to 31.2 VDC)
Common Mode Rejection	60 dB at 50/60 Hz
Normal Mode Rejection	65 dB at 50/60 Hz (20 Hz filter); 70 dB at 50/60 Hz (4.17 Hz filter)
Environmental Conditions	
Operational Temperature	0 °C -+55 °C (32 °F - +131 °F)
Storage Temperature	-40 °C - +85 °C (-40 °F - +185 °F)
Relative Humidity	5% - 95% (non-condensing)
Thermal Dissipation	5.18 Watts
Certifications	UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div 2, Groups ABCD), CE, ATEX, CCC, CMIM, UKCA, IECEx
Terminal Base	1794-TB3G