

POINT I/O™

# 1734sc-IF4U/ 1734sc-IF4UK

## 4-Channel Universal Analog Input Module



The 1734sc-IF4U Input Module provides full universal analog input capability in one I/O module. The 1734sc-IF4U module can replace current-loop and voltage analog input, thermocouple, and RTD modules without compromising performance or price. When applying multiple input types to the module, in lieu of purchasing dedicated input modules, you actually save cabinet space and total system cost. The 1734sc-IF4IUK Input Module is conformally coated.

- Four analog input channels: Voltage; current; or 3 thermocouple, or 2 RTD/resistance inputs.
- 5 input types.
- Use any combination of input types at one time (RTD uses channel pairs).
- Each channel can be programmed individually.
- Easy to configure using ladder registers or Studio 5000 programming software, add-on profile (AOP) available.
- Channel-selectable filtering for fastest analog update time and noise rejection.
- Cold junction compensation included for thermocouples.
- Accuracy comparable with dedicated analog modules.

# Specifications

Channels Per Module	4 Voltage, Current, or 3 Thermocouple, or (2) RTD/Resistance
Input Types: Thermocouple RTD Resistance Current Voltage	J, K, T, E PT385/3916, Ni618/672, NiFe518, Cu426 0-3000 ohms 0-20 mA, 4-20 mA ±50 mV, ±100 mV, 0-5 V, 1-5 V, 0-10 V, ±10 V pH sensor ±1V
Resolution	18 bits (filter dependent)
Accuracy: Voltage/Current Thermocouple RTD	± 20 µV for ± 50 mV inputs ± 0.6°C for Type J ±0.5°C for 1K Ohm Platinum
Advanced Features	
Filtering	4 filter frequencies (individually selectable by channel)
Input Overvoltage Protection	+24 VDC continuous
Input Overcurrent Protection	32 mA continuous
Update Times (ms) * 8-Channel Sample Time (sec) * with TC/RTD, update times may be longer. Update times do not include autocalibration time.	512 ms at 4 Hz to 37 ms at 470 Hz
Data Formats	Engineering ×1, Engineering ×10, Raw, Scaled for PID
Electrical Isolation (continuous)	50 VDC field-wiring-to-backplane; 50 VDC field-wiring-to-chassis-ground; 10 VDC channel-to-channel isolation.
Input Impedance	253 Ohm, current; 5 Mohm, voltage, thermocouple, RTD
Common Mode Rejection	<96 dB at 50/60 Hz
Normal Mode Rejection	65 dB to 74 dB at 50/60 Hz
Backplane Current Required	20 mA at 24 VDC max 15 mA at 5 VDC max
Thermal Dissipation	1.0 Watt, maximum
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	-20 °C -+ 55 °C (-4 °F - +130 °F) -40 °C - +85 °C (-40 °F - +185 °F) 5% - 95% (non-condensing)
Conformal Coating	ANSI/ISA 71.04.2013 G3 Environment Standard
Certifications	UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div. 2, Groups ABCD), CE, UKCA, ATEX, CCC, CMIM