

CompactLogix™

1769sc-IF8u/1769sc-IF8uK 8-Channel Universal Analog Input Module



The 1769sc-IF8u/1769sc-IF8uK Input Modules provide full universal analog capability in one I/O module. The 1769sc-IF8uK Input Module is conformally coated. The modules can replace analog input, thermocouple, and RTD modules without compromising performance or price.

- Eight analog input channels: Voltage; current; thermocouple; 4 channels RTD/resistance.
- Five input ranges.
- Use any combination of input types at one time.
- Individually programmable for each channel.
- Easy to configure using 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.
- 3- or 4-wire support for RTDs.
- Accuracy comparable with dedicated analog modules.

1769sc-IF8u(K)

Specifications



Channels Per Module	8 Voltage, Current, Thermocouple, or (4) RTD/Resistance
Input Ranges: Thermocouple RTD Resistance Current Voltage	J, K, T, B, E, R, S, N, C PT385/3916, Ni618/672, NiFe518, Cu426 0-150, 0-1000, 0-3000 ohms 0-20 mA, 4-20 mA ±50 mV, ±100 mV, 0-5 V, 1-5 V, 0-10 V, ±10 V
Resolution	16 bits
Advanced Features	
Filtering	6 filter frequencies (individually selectable by channel)
Input Overvoltage Protection	±30 VDC continuous
Input Overcurrent Protection	±40 mA continuous
Update Times (ms)* 8-Channel Sample Time (sec) * with TC, update times may be longer.	Update times differ according to time versus filter: Examples: 305 ms at 10 Hz to 9 ms at 1000 Hz one channel enabled 2.7 sec at 10 Hz to 63 ms at 1000 Hz 8 channels enabled
Data Formats	Engineering units, Engineering units ×10, Scaled for PID, Raw/Prop. Counts, Percent of Full Scale
Electrical Isolation (continuous)	50 VAC field-wiring-to-backplane (707 VDC for 1 minute) 50 VAC field-wiring-to-chassis-ground (707 VDC for 1 minute) 10 VDC channel-to-channel isolation
Input Impedance	>10 Mohm; thermocouple, voltage, RTD <250 ohm, current
Common Mode Rejection	115 dB at 50/60 Hz
Normal Mode Rejection	85 dB at 50/60 Hz
Backplane Current Required	45 mA at 24 VDC max 150 mA at 5 VDC max
Thermal Dissipation	3.0 Watts, maximum
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	0 °C -+ 60 °C (32 °F - +140 °F) -45 °C - +85 °C (-49 °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, ATEX, CCC, CMIM, UKCA