

MicroLogix™ 1762sc-IF8U 8-Channel Universal Analog Input Module



The 1762sc-IF8u Input Module provides full universal analog capability in one I/O module. The 1762sc-IF8u module can replace analog input, thermocouple, and RTD modules without compromising performance or price.

- Eight analog input channels: Voltage; current; thermocouple; or three thermocouple, or two RTD/resistance inputs or 4 RTD/ resistance (3- or 4-wire).
- Thirty-two input types.
- Use any combination of input types at one time.
- Individually programmable for each channel.
- Easy to configure using Studio 5000 programming software.
- 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.

1762sc-IF8U Specifications



Input Channels	8 Voltage, Current, or Thermocouple, or 4 RTD/Resistance (2-, 3- or 4-wire)
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	4 filter frequencies (individually selectable by channel)
Input Overvoltage Protection	±28 VDC continuous
Input Overcurrent Protection	42 mA continuous
Accuracy	±0.6°C J TC, ±20 µV ±50 mV, ±20 µA 0-20 mA, ±0.5 °C PT 385/3916, ±0.15 Ohms 150 Ohm
Update Times (ms) * 8-Channel Sample Time (ms) * with TC, update times may be longer	495 ms at 4 Hz to 20 ms at 470 Hz single channel 3.96 s at 4 Hz to 160 ms at 470 Hz 8 channels
Data Formats	Scaled for PID, Prop. Count, Engineering Units, Engineering Unit ×10
Electrical Isolation (continuous)	50 VAC continuous 10 VDC channel-to-channel isolation
Input Impedance	249 ohms, current
Common Mode Rejection	100 dB at 50/60 Hz
Normal Mode Rejection	65 dB to 74 dB at 50/60 Hz
Backplane Current Required	175 mA at 5 V maximum, 21 mA at 24 V maximum
Thermal Dissipation	1.40 Watt, maximum
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	-20 °C - 60 °C (-4 °F - 140 °F) -40 °C - 85 °C (-40 °F - 185 °F) 5% - 95% (non-condensing)
Certifications	UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div 2, Groups ABCD), CE, UKCA, CMIM