

1769sc-IF8u 8-Channel Universal Analog Input Module

for Allen-Bradley CompactLogix™ and MicroLogix™ 1500 PLCs



- Eight channels of voltage, current and thermocouple or 4 channels of RTD/resistance input provide a flexible solution for applications requiring mixed analog input.
- Any combination of input types may be used at one time.
- Features 500 Vdc channel-to-backplane isolation; 500 Vdc channel-to-chassis ground isolation; 10 Vdc channel-to-channel isolation.
- Easily configured by ladder register settings and on-board jumpers.
- Channel selectable filtering for maximum speed with minimum noise.
- Fully auto-calibrating for best possible accuracy.
- Cold junction compensation included for thermocouples.
- Low power consumption.

Reduce System Costs

The 1769sc-IF8u can reduce system costs replacing dedicated analog I/O modules with one module. The 1769sc-IF8u module can replace analog input, thermocouple and RTD modules without compromising performance. Mix and match input types to reduce your analog I/O module count. Installation is simplified and costs are reduced by using a common I/O within your system.

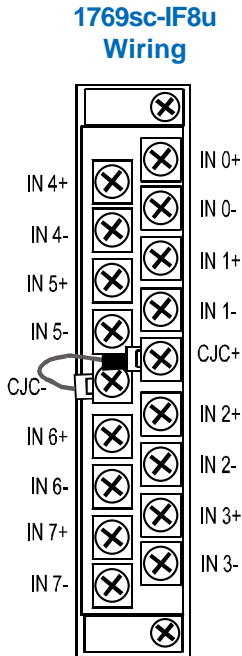
State-of-the-Art Features

The broad variety of input types and configuration options provide unsurpassed flexibility and simplify integration. Features such as input type, open circuit detection, high and low range alarms are individually programmable for each channel. Accuracy is comparable to dedicated analog input modules. The module incorporates proprietary Allen-Bradley ASIC technology insuring operation and performance mirror existing Allen-Bradley products. Configuration is accomplished using existing programming software.

The Spectrum Controls 1769sc-IF8u is compatible with Allen-Bradley MicroLogix 1500 and CompactLogix controllers. It offers the functionality of dedicated analog input modules without compromising performance or price.

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Inputs per Module	8 (eight) V,C,TC; 4 (four) RTD, Resistance
Module Location	CompactLogix 1769 , MicroLogix 1500
Input Types Thermocouple RTD Resistance Current Voltage	J, K, T, B, E, R, S, N, C PT385/3916, Ni618/672, NiFe518, Cu 426 0-150, 0-1000, 0-3000 ohm 0-20 mA, 4-20 mA ±50mV, ±100mV, 0-5V, 1-5V, 0-10V, ±10V
Advanced Features	6 filter frequencies (individually selectable by channel); fully auto-calibration; on-board error checking; open circuit detection for most input types
Update Times* With eight channels enabled * = TC update times may be longer	0.30 sec @ 10 Hz 0.63 sec @ 50 Hz 0.53 sec @ 60 Hz 0.15 sec @ 250 Hz 0.09 sec @ 500 Hz 0.07 sec @ 1000 Hz
Communication Formats	16-bit two's complement Engineering units, Engineering units x10 Scaled for PID, Proportional Count
Electrical Isolation (continuous)	±10 Vdc channel-to-channel 500 Vdc field-wiring-to-backplane 500 Vdc field-wiring-to-chassis-ground
Input Impedance	>10 Mohm Thermocouple, Voltage, RTD <250 ohm, Current
Input Overvoltage Protection	+30 Vdc continuous
Input Overcurrent Protection	28mA continuous
Common Mode Rejection	115 dB @ 50/60 Hz
Normal Mode Rejection	85 dB @ 50/60 Hz
Backplane Current Required	45 mA @ 24 V max 150 mA @ 5 V max
Thermal Dissipation	3.00 Watts, maximum
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	0° to 60°C (32° to 140°F) -40° to 85°C (-40° to 185°F) 5 to 95% (non-condensing)
Certifications	UL/cUL (Class I, Div 2, Groups ABCD) and CE
Recommended Cable	For TC inputs: Shielded, twisted-pair TC extension wire For RTD, mV, V or mA inputs: Belden 8761 or equivalent



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