



## 2080sc-IF4u

### 4-Channel Universal Analog Input Plug-In Module

for Allen-Bradley Micro830 and Micro850 Series PLCs



- Up to 4 channels of voltage, current or thermocouple or 1 or 2 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.
- 50 Vdc channel-to-chassis ground isolation;
- Easily configured using existing programming software.
- Channel selectable filtering for maximum speed with minimum noise.
- Factory calibrated for best possible accuracy.
- Cold junction compensation included for thermocouples.
- Low power consumption.

#### Reduce System Costs

The 2080 Universal can reduce system costs replacing dedicated analog I/O modules with one module. The 2080 plug-in 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 through plug-in technology 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 Rockwell Automation technology insuring operation and performance mirror existing Allen-Bradley products. Configuration is accomplished using existing programming software.

The Spectrum Controls 2080 plug-in is compatible with Allen-Bradley Micro830 and Micro850 controllers. It offers the functionality of dedicated analog input modules without compromising performance or price.

# 2080sc-IF4u

## 4-Channel Universal Analog Input Module

for Allen-Bradley Micro830 and Micro850 Series PLCs

Inputs per Module	4 V,C,TC; 2 (four wire) RTD, Resistance
Module Location	Micro830, Micro850
Input Types Thermocouple RTD Resistance Current Voltage	J, K, T, E PT385/3916, 0-150, 0-1000, 0-3000 ohm 0-20 mA, 4-20 mA $\pm 50\text{mV}$ , $\pm 100\text{mV}$ , 0-5V, 1-5V, 0-10V, $\pm 10\text{V}$
Advanced Features	5 filter frequencies (individually selectable by channel); open circuit detection for most input types
Update Times* With two channels enabled * = TC update times may be longer	2.44 sec @ 10 Hz 0.53 sec @ 50 Hz 0.45 sec @ 60 Hz 0.15 sec @ 250 Hz 0.09 sec @ 500 Hz
Communication Formats	12-14-bit two's complement Engineering units, Engineering units x10 Scaled for PID, Proportional Count
Electrical Isolation (continuous)	$\pm 10$ Vdc channel-to-channel 500 Vdc field-wiring-to-backplane
Input Impedance	>10 Mohm Thermocouple, Voltage, RTD <250 ohm, Current
Input Overvoltage Protection	+28 Vdc continuous
Input Overcurrent Protection	28mA continuous
Common Mode Rejection	90 dB @ 50/60 Hz
Normal Mode Rejection	75 dB @ 50/60 Hz
Backplane Current Required	45 mA @ 24 V max 5 mA @ 3.3 V max
Thermal Dissipation	1.2 Watts, maximum
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	-20° to 65°C (-4 to 149°F) -45° to 85°C (-49° 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



Corporate Headquarters  
Spectrum Controls, Inc.  
P.O. Box 6489 • Bellevue, WA 98008 USA  
Tel 425-746-9481 • Fax 425-641-9473  
Email [spectrum@spectrumcontrols.com](mailto:spectrum@spectrumcontrols.com)  
[www.spectrumcontrols.com](http://www.spectrumcontrols.com)

