Micro850/870®
EXPANSION I/O
HIGHEST DENSITY & BEST PRICE PER POINT!

Catalog numbers:
2085sc-IF8U, 2085sc-OF8, 2085sc-IF16V, 2085sc-IF16C, 2085-IF4XOF4-SC

www.spectrumcontrols.com

SPECTRUM CONTROLS

> *Fully licensed Rockwell Automation technology; Rockwell TechConnect phone support included with your purchase.*
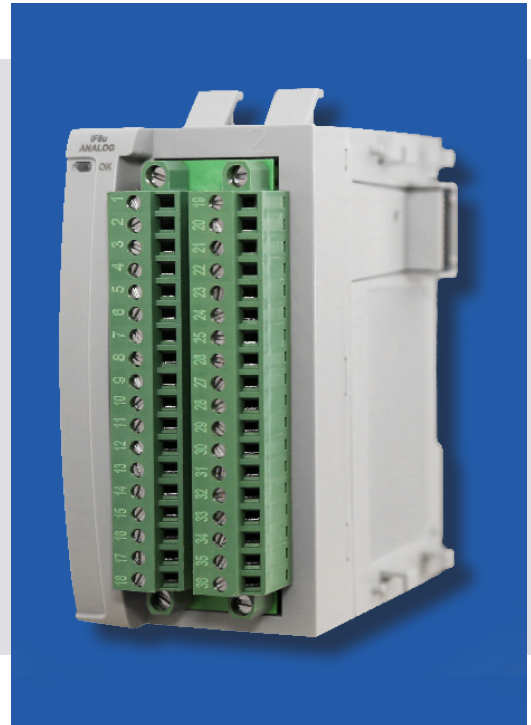
About Us

Spectrum Controls is the first company to build licensed, core-technology I/O modules for the Rockwell Automation product line. Our innovative designs incorporate state-of-the-art features with dependable performance. In addition to being a Rockwell Automation Global Encompass Partner, technical support is offered for every I/O module through the Rockwell TechConnect Support program at no additional cost to the customer.

As a leader in I/O for the industrial controls marketplace, our market-driven I/O modules provide a cost-effective solution to complex applications. Universal analog, high-density, analog+HART, and other versatile configuration options are just a few of the advantages of using I/O from Spectrum Controls.

SPECTRUM
CONTROLS

8-Channel Universal Analog Input
2085sc-IF8U

- Minimize your cost per I/O point with our affordable universal analog module.

- Flexible universal analog module with best-in-class performance.

- Save rack space for future applications.

- Simplify your installation, and lower your total system costs by standardizing on our price competitive universal I/O.

Key Specifications

- Supports up to 8 voltage, current, thermocouple, or RTD/resistance inputs.
- Differential inputs provide low-level, channel-to-channel isolation.
- Configurable open circuit detection.

Specification	Description
Number of Inputs	8 Differential Inputs
Input ranges	Current: 0 - 20 mA, 4 - 20 mA
	Voltage: ±50 mV, ±100 mV, 0 - 5 V, 0 - 10 V, ±10 V
	RTD: 100 Ω, 200 Ω, 500 Ω, and 1000 Ω Pt385 & Pt3916, 120 Ω Ni618 & Ni672, 10 Ω Cu 426, 604 Ω NiFe 518
	Resistance: 0-150 Ω, 0-500 Ω, 0-1000 Ω, 0-3000 Ω
	Thermocouple: Type J, N, T, K, E, S, R, C, B
Resolution	16-bit
Input filters	4 Hz, 17 Hz, 60 Hz, 470 Hz
Update Rate	51 ms at 60 Hz per channel
Power Consumption	100 mA at 5 V, 14 mA at 24 V
Operating Temp. Range	-20 °C to +65 °C

SPECTRUM
C O N T R O L S

8-Channel High-Density Analog Output
2085sc-OF8

- Minimize your cost per I/O point with our affordable output analog module.
- Save money with a single high-density analog module, instead of multiple low-density I/O modules.
- Channel selectable voltage and current output ranges.
- Lower your total system costs by standardizing on our price competitive high-density I/O.

Key Specifications

- The highest density analog output available for Micro850 controllers.
- Configurable open circuit detection.
- Supports process alarms.

Specification	Description
Number of Inputs	8 Outputs
Output Types	0 mA - 20 mA, 4 mA - 20 mA
	0 V to +5 V, 0 V to +10 V, ±10 V
Resolution	16-bit
Output Load	50 to 500 Ohm
Output Impedance	>1 Megaohm
Power Consumption	110 mA at 5V, 20 mA at 24V, 260 mA at 24 V Field Power
Operating Temp. Range	-20 °C to +65 °C

16-Channel High-Density Analog Input
2085sc-IF16V, 2085sc-IF16C

- Choose between a current or voltage version for high performance analog inputs with up to 16-bit resolution.

- Minimize your cost per I/O point with up to 16 single-ended voltage or current inputs.

- Best price per point value on Micro850® platform.

- Simplify your installation by standardizing on a common I/O.

Key Specifications

- The highest density analog input available for Micro850 controllers.
- Configurable open circuit detection.
- Supports process alarms.

Specification	Description
Number of Inputs	16 Single-Ended Inputs
Input Types	2085sc-IF16C: 0 mA - 20 mA, 4 mA - 20 mA
	2085sc-IF16V: 0 V to +5 V, 0 V to +10 V, ±10 V
Resolution	16-bit
Input filters	4 Hz, 17 Hz, 60 Hz, 470 Hz
Update Rate	50 ms at 60 Hz per channel
Power Consumption	100 mA at 5 V, 20 mA at 24 V
Operating Temp. Range	-20 °C to +65 °C

SPECTRUM CONTROLS

4-Channel Combo Analog Input & Output
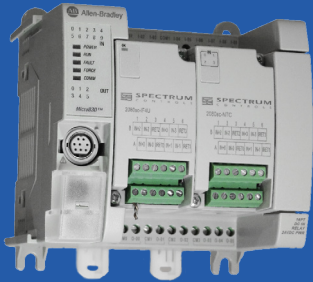## 2085-IF4XOF4-SC

- Minimize your cost per I/O point with our affordable combo analog module.

- Great for applications requiring mixed analog inputs and outputs.

- Mix and match analog inputs and outputs without compromising performance.

- Save money with a single combo analog module, instead of multiple dedicated analog I/O modules.

Key Specifications

- Save rack space with this high performance input/output module.
- Configurable open circuit/output fault detection.
- Supports four data formats.

Specification	Description
No. of Inputs/Outputs	4 Inputs/4 Outputs
Input/Output Types	0 mA - 20 mA, 4 mA - 20 mA, 0 V to +5 V, 0 V to +10 V, ±10 V
Resolution	16-bit
Input filters	4 Hz, 17 Hz, 62 Hz, 470 Hz
Update Rate	Inputs 131 ms at 17 Hz per channel/ filter per channel; output; 10 ms
Power Consumption	110 mA at 5 V, 125 mA at 24 V
Operating Temp. Range	-20 °C to +65 °C

SPECTRUM
C O N T R O L S

Also check out our Micro800® Plug-in Modules!

We have plug-ins for BACNet communication, analog inputs for Thermistor, and Universal (voltage, current, thermocouple and RTD/resistance) applications, and a High Current Relay Output module.

Please visit www.spectrumcontrols.com for more information!

Agency Certifications

UL/cUL Certifications
UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div 2, Groups ABCD).
UL/cUL Listed UL 61010-2-201
FCC Part 15 Class A compliance

CE Compliant to LV and EMC directives
EN 61010-2-201
EN 61131-2, Programmable Controllers (Clause 8, Zone A & B)
IEC 61000-6-4 (emission) and IEC 61000-6-2 (immunity)
RoHS, REACH

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SPECTRUM
CONTROLS

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