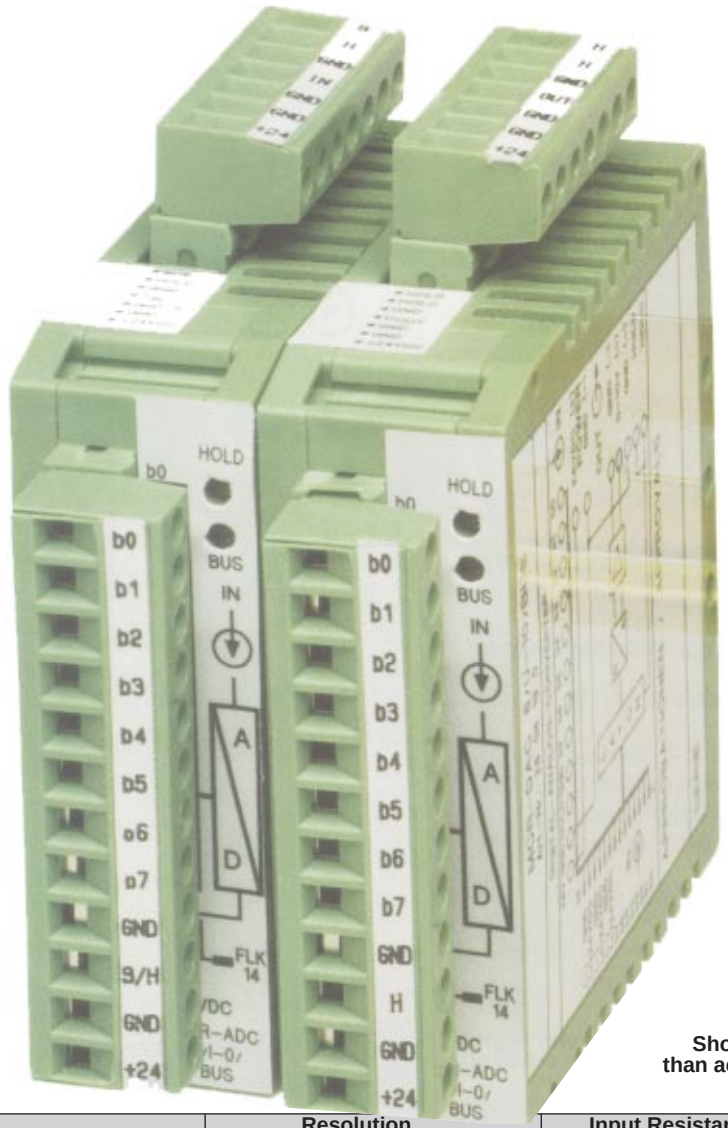
DIN Rail Mount A/D Converters
MCR-ADC Series

A/IN DI/O

$232
Basic Unit

1 YEAR WARRANTY

- **A/D Conversion with 8 or 12-Bit Binary Resolution**
- **0 to 5 V, 0 to 10 V, ±10 V, or 4 to 20 mA Inputs Available**
- **0 = Low or 24 Vdc = High Output Signal**
- **Start/Hold Conversion Feature for Stable Output Value**
- **Screw Terminal and Ribbon Cable Connections**



Shown larger than actual size.

The MCR-ADC converter modules accept analog voltage or current signals, converting them to a digital output of either 8 or 12-bit resolution. These modules are designed to feed digital data directly to a PLC or data acquisition device, while removing the burden of A/D from the equipment. A start/hold conversion function allows stable acquisition of the binary value. Coupled with bus control, this feature allows PLC's or data acquisition equipment time to evaluate the binary value. Modules feature easy termination and installation via screw terminals, or ribbon cable header. Installation is via standard DIN rail mounting.

	Resolution		Input Resistance	
Input Range	**8-Bit**	**12-Bit**	**8-Bit**	**12-Bit**
0 to 5 V	19.5 mV	1.22 mV	1 MΩ	1 MΩ
0 to 10 V	39 mV	2.44 mV	400 kΩ	1 MΩ
±10 V	78 mV	4.88 mV	400 kΩ	1 MΩ
0 to 20 mA	78 µA	4.88 µA	50 Ω	50 Ω
4 to 20 mA	63 µA	3.91 µA	50 Ω	50 Ω

To Order *(Specify Model Number)*

Model Number	8-Bit Price	12-Bit Price	Description
MCR-ADC(*)/U-5/BUS	**$232**	**$400**	A/D module, 0 to 5 V input
MCR-ADC(*)/U-10/BUS	**232**	**400**	A/D module, 0 to 10 V input
MCR-ADC(*)/U-10B/BUS	**232**	**400**	A/D module, ±10 V input
MCR-ADC(*)/I-4/BUS	**232**	**400**	A/D module, 4 to 20 mA input

** Specify A/D resolution, "8" for 8-bit, or "12" for 12-bit*

Ordering Example: *MCR-ADC12/U-10/BUS 12-bit A/D converter module, 0 to 10 Vdc input,* ***$400.***

Specifications

INPUT

Ranges: 0 to 5 V, 0 to 10 V, ±10 V, 4 to 20 mA

Max Input: ±30 V/±100 mA

Accuracy (% FS): 12-bit models: ±0.5 LSB; 8-bit models: ±1 LSB

Free Running Conversion Time:
12-bit models: 200 µs
8-bit models: 330 µs

Power: 20 to 30 Vdc

Input Surge Suppression: surge suppressing diode

Input Clamping Voltage: 36 V

OUTPUT

Lead/Line Resistance or Burden: ≥1 kΩ

Max Current/Bit: 25 mA

Current Consumption: 40 mA, 8-bit; 25 mA, 12-bit

GENERAL

Operating Ambient: 0 to 55°C (32 to 131°F)

Bus Control Signal Thresholds: 20 to 30 Vdc for high (1) signal; 0 to 5 Vdc for low (0) signal