

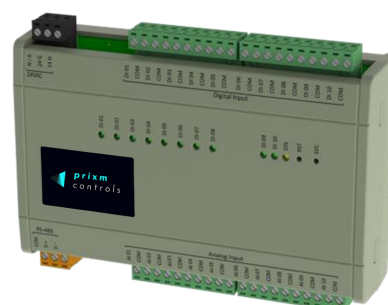


ARC IOM MODULE

2021 CATALOGUE



THE **ARC IOM** EXPANSION MODULE IS NETWORK CENTRIC, CONTAINING HIGH PERFORMANCE DIGITAL INPUTS AND ANALOG INPUTS TO ACCOMMODATE GENERAL AND SPECIFIC APPLICATIONS, FEATURING MODBUS RS-485



GENERAL FEATURES & SPECIFICATIONS



High-Speed Data Rates

Multiple serial communication (RS-485) speed selection from 9.6kbps to 115.2kbps.

Device ID

ARC IOM Module can be uniquely identified over the network. Device ID is set through specific Modbus register.

Network Security

All configurations changes are protected via password setting, either through standard network protocol access.

High Accuracy Analogue Input Channels

High speed 12-bits A/D converter with programmable gain amplifier yields a high resolution and accuracy reading on analogue input points.

Status Indicator

Operational activity on each individual channel of DIs are conveniently indicated by LED, so as the Operation.

Electrical & Environmental Limits

- Power Supply: 24VAC +/- 5%, 1.2VA max, or (22~26) +/- 5%VDC
- Consumption: 50mA max @ 24VDC
- Operating Temperature: 32° to 150° F (0° to 65° C)
- Storage Temperature: -4° to 150° F (-20° to 65° C)
- Operating Humidity: 10% to 95% RH (non-condensed)

Input & Output

Universal Input:

- 10 Channels (12-bits Resolution)
- Voltage: 0 – 10V ($\pm 1\%$ V)
- Current: 0 – 20mA ($\pm 1\%$ mA)
- Resistance: 0 – 30k ($\pm 1\%$ Ω)
- Thermistor: 10k, 10k Shunt, 1k Balco, 1k Platinum (All $\pm 1\%$ °C)

Digital Input:

- 10 Channels
- Type: Voltage Free
- Limit: +24V at 500 Ω maximum

Reset Switch

A Reset Switch has been provided for system reset without power removal (Warm Start operation).

Firmware Upgrade / Configuration

The controller firmware can be upgraded either through RS-485 with built-in bootloader. Network communication and operation parameters can be changed with Modbus register(s).

Robust System Operation

Software watchdog timer is provided for high reliability operation.

Ease of Installation

All I/Os are connected via field removable terminal block connectors for easy maintenance. The controller casing fits standard DIN rail mounting.

Communication

Physical Interface 1 (Port 1):

- EIA-485 Standard (Bus A, B) two-wire
- Half Duplex
- Baud Rate Speed: 9.6k, 19.2k, 38.4k, 76.8k, 115.2k bit/s
- Data Bit: 8 bits
- Application Protocol: Modbus, BACnet® MSTP, Sedona
- Multi-drop Capability: Yes (Hardware ID Setting)
- Integrated termination resistor, enable through Modbus register

Mechanical

- Dimension: 168mm (L) x 120mm (W) x 45mm (H)
- Material: UL94 ABS
- Weight:

Compliance

- CE & FCC