

# 4800 Controller



## SPECIFICATIONS

ENCLOSURE:	NEMA 4X ABS plastic enclosure
ANALOG INPUTS:	8-48 analog inputs (8 per card): 4-20 mA, 0-20 mA, 0-1V, 0-5V, 0-10V, +/-1V, +/-5V, +/-10V
DIGITAL INPUTS:	0-72 digital Modbus RTU inputs
OUTPUTS:	Fully programmable relay outputs (4 per card)
DISPLAY:	LCD display for programming and viewing channel information. Tri-color LEDs for each analog input and relay output to show status of channel.
ALARM NOTIFICATION:	LCD alarm notification, LED alarm notification, audible alarm notification via local speaker, telephone dial out notification.
PROGRAMMING INTERFACE:	Local keypad or remotely via telephone
EVENT LOG:	Stores 1,000 entries. Entries include entering and leaving alarm states, peak readings and calibrations.
TEMPERATURE RANGE:	-40°F to +185°F (-40°C to +80°C)
OPERATING POWER RANGE:	100-240 VAC, 15-18 VDC, on board battery backup.

The 4800 Controller from Industrial Scientific is an 8 - 48 analog input controller. With its optional onboard relays, the 4800 can control alarms, fans, horns, etc., when alarm conditions are reached. Being fully programmable, relays can be set to activate from multiple channels, or multiple relays can be programmed to a single channel. Time delays can also be programmed for each relay. This allows the relays to activate after alarm conditions are met for specified periods, or de-activate after a specified time prior to an alarm.

Along with monitoring analog signals, the 4800 Controller can also monitor up to 72 digital Modbus RTU inputs. The 4800 can be set up as a Modbus RTU master unit to monitor these channels, or it can be set up as a Modbus RTU slave device. As a Modbus RTU slave device, the 4800 Controller can communicate to SCADA, HMI, and PLC controlled systems.

With a telephone line interface, the 4800 Controller has remote call out capabilities. This allows the controller to phone, fax, or page alarm notifications to users. Phone lists are user programmable and can be entered in a priority. The 4800 can also be remotely programmed via the telephone.

To keep track of events, the 4800 Controller has a built in event log. The event log will store 1,000 events. Events consist of calibrations, peaks, and alarms. The event log can be viewed via a local printer connected to the 4800 Controller, or through a PC.

## KEY FEATURES

- 8 - 48 analog inputs
- Up to 72 digital ModBus inputs
- Programmable relay outputs
- Telephone alarm notification
- 1,000 entry event log
- ModBus master or slave device
- Printer interface
- Independent relay activation
- Easy channel configuration
- Remote telephone dial-up capabilities

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The 4800 Controller is an analog/digital input/output system controller with remote dial out and access capabilities. The base unit consists of a micro-controller with display, modem, AC and phone line surge protection and 24-hour battery back up. A maximum number of 72 channels can be used, however the maximum number of modules (input and output) can not exceed 6 in any combination. Industrial Scientific recommends that a fixed system application survey be completed to help provide the most accurate assessment of your equipment requirements.

**4800 Controller Base Part Number:** 4800-**ABCDEFGHIH**

**Ordering example:** A 4800 Controller in a NEMA 4X wall mounted enclosure with 16 analog input channels, 8 ModBus RTU input channels, and 8 relay contacts would have a part number of **4800-12010200**

## 4800 Controller Part Number / Ordering Matrix

<b>A</b> – Base unit	<b>E</b> – Controller to controller support options
<b>B</b> – Analog input options	<b>F</b> – Relay options
<b>C</b> – Digital input options	<b>G</b> – Datalogging options
<b>D</b> – ModBus RTU support options	<b>H</b> – SCADA connection options

### A – Base unit

- 1 – NEMA 4X Wall mount, display, 24 hr. battery back up
- 2 – Sub-Panel Mount w/display, 24 hr. battery back up
- 3 – Flush Mount w/display, 24 hr. battery back up
- 4 – NEMA 4X Wall mount enclosure w/display, 24 hour battery back up and internal 24 VDC, 100W Power supply

### B – Analog input options

- 0 – None
- 1 – (1) 8 Channel analog module
- 2 – (2) 8 Channel analog modules (16 channels)
- 3 – (3) 8 Channel analog modules (24 channels)
- 4 – (4) 8 Channel analog modules (32 channels)
- 5 – (5) 8 Channel analog modules (40 channels)
- 6 – (6) 8 Channel analog modules (48 channels)

### C – Digital (Dry Contact) input options

- 0 – None
- 1 – 4 - Channel digital input module
- 2 – 8 - Channel digital input module

### D – ModBus RTU input channels support options

- 0 – None
- 1 – 8 Channels of RTU supported
- 2 – 16 Channels of RTU supported
- 3 – 24 Channels of RTU supported
- 4 – 32 Channels of RTU supported
- 5 – 40 Channels of RTU supported
- 6 – 48 Channels of RTU supported
- 7 – 56 Channels of RTU supported
- 8 – 64 Channels of RTU supported
- 9 – 72 Channels of RTU supported

### E – Controller to controller support options

- 0 – None
- 1 – Controller to controller communication capable

### F - Relay options

- 0 – None
- 1 – 1 - 4 Relay contact module
- 2 – 2 - 4 Relay contact module
- 3 – 3 - 4 Relay contact module
- 4 – 4 - 4 Relay contact module

### G – Datalogging options

- 0 – None
- 1 – Datalogging

### H – SCADA connection options

- 0 – None
- 1 – ModBus slave support via serial, phone or radio modem connection

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