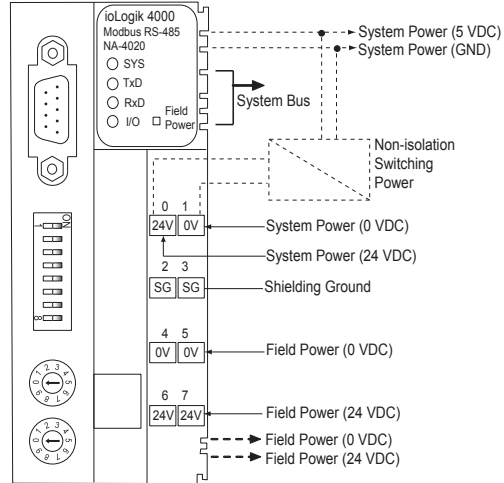


# NA-4020/4021

## RS-485 or RS-232 network adaptors



The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.



### Specifications

#### Serial Communication Parameters

- Parity:** None, Even, Odd
- Data Bits:** 7, 8
- Stop Bits:** 1, 2
- Baudrate:** 1200 to 115200 bps

- Signals:**
  - NA-4020: Data+, Data-, Gnd, DIR
  - NA-4021: TxD, RxD, Gnd

#### Software Features

- Protocols:** Modbus/RTU, Modbus/ASCII
- Modbus Address:** 00 to 99 (set by rotary switches)
- Utility:** ioAdmin
- Programming Library:** MXIO DLL library for Windows; Supports Visual Basic, Visual C++, Borland C++ Builder
- Number of I/O Modules Supported:** Max. of 32

#### Power Requirements

- Power Input:** 11 to 28.8 VDC, 24 VDC typical
- Power Consumption:** 70 mA typical @ 24 VDC
- Current for I/O Modules:** Max. 1.5 A @ 5 VDC

#### Field Power

- Rated Voltage:** 11 to 28.8 VDC, 24 VDC typical
- Current in Field Power Contact:** Max. 10 A

#### Isolation

- System Power to I/O Driver:** Optical isolation

#### Physical Characteristics

- Dimensions:** 42 x 99 x 70 mm (1.65 x 3.9 x 2.75 in)
- Weight:** 150 g

#### Environmental Limits

- Operating Temperature:** -10 to 60°C (14 to 140°F)
- Storage Temperature:** -40 to 85°C (-40 to 185°F)
- Ambient Relative Humidity:** 5 to 95% (non-condensing)

#### Regulatory Approvals

- Safety:** UL508
- EMC:** CE IEC 61000-6-2, IEC 61000-6-4
- Vibration:** IEC-68-2-6 (2 g's during operation)

#### Warranty

- Warranty Period:** 2 years
- Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

### Ordering Information

Step 1: Select a network adaptor module



Step 2: Select I/O modules



Step 3: Select power modules (optional)



#### Available Models

**NA-4020:** RS-485 network adaptor (Modbus)

**NA-4021:** RS-232 network adaptor (Modbus)

Note: The NA-4020/4021 RS-485/232 network adaptors can be expanded by adding up to 32 I/O modules. See pages 5-33 to 5-41 to select the M- series modules for your application.

## Modular Remote I/O Selection Guide

### I/O Modules



		DC-Digital Inputs				AC-Digital Inputs	
Specs	Model	M-1800	M-1801	M-1600	M-1601	M-1450	M-1451
	Channels	8	8	16	16	4	4
	Sink/Source	Sink	Source	Sink	Source	---	---
	Connector	RTB	RTB	20-pin	20-pin	RTB	RTB
	Voltage	24 VDC	24 VDC	24 VDC	24 VDC	110 VAC	220 VAC
	Isolation	Optical isolation					



		Digital Outputs				
Specs	Model	M-2800	M-2801	M-2600	M-2601	M-2450
	Channels	8	8	16	16	4
	Sink/Source	Sink	Source	Sink	Source	Relay
	Connector	RTB	RTB	20-pin	20-pin	RTB
	Voltage	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC
	Current	0.5 A	0.5 A	0.3 A	0.3A	0.5 A
	Isolation	Optical isolation				



		Analog Inputs			
Specs	Model	M-3802	M-3810	M-6200	M-6201
	Channels	8	8	2	2
	Current	4 to 20 mA	---	---	---
	Voltage	---	0 to 10V	---	---
	Connector	RTB	RTB	RTB	RTB
	Resolution	12-bit	12-bit	---	---
	Isolation	Optical isolation			
	Sensor Input	---	---	RTD(ohm)	Thermo-couple (mV)



		Analog Outputs	
Specs	Model	M-4402	M-4410
	Channels	4	4
	Current	4 to 20 mA	---
	Voltage	---	0 to 10 V
	Connector	RTB	RTB
	Resolution	12-bit	12-bit
	Isolation	Optical isolation	

### Power Modules

		Power Modules			
Specs	Model	M-7001	M-7002	M-7804	M-7805
	Channels	0	0	8	8
	Voltage	24 VDC	DC: 5, 24, 48 VDC AC: 110/220 VAC	0 VDC	24 VDC
	Purpose	System Power	Field Power	Field Power	Field Power