### For the latest prices, please check AutomationDirect.com. 1-800-633-0405 **BX-SERIO-2** Serial Communications

Specification Number of Ports

Description

Data Rates

Port Type

RXD

TXD

GND

CTS

RTS

(TXD/RTS)

. Protection

Consumption Heat Dissipation

Software Version

Weight

Swing

Default Settings

Port Status LED

Maximum Output Load

Minimum Output Voltage

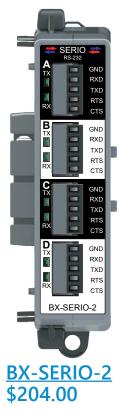
Maximum Cable Distance

Replacement Connector Backplane Power

**Output Short Circuit** 

Cable Requirements

Supported Protocols



4 port, RS-232 with Flow Control

#### Four (4) <u>BX-RTB05S</u> Terminal Blocks included.



NOTE: This device does not support **ZIP**Link Wiring Systems

#### **IMPORTANT!**



Hot-Swapping Information
te: This device cannot be Hot Swapped.

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**NOTE:** Cannot be used in Remote I/O Bases.

**Serial Communications Specifications** 

BX-SERIO-2

Four RS-232 Serial Ports Isolated serial port that can communicate via RS-232.

Includes ESD protection and built-in surge protection. Do-more! Protocol (Default) Modbus RTU (Master & Slave)

K-Sequence (Slave)

ASCII (In & Out)

1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200 bps

RS-232, 115200bps, No Parity, 8 Data Bits, 1 Stop Bit, Station #1

Green LED illuminated when active (TXD and RXD)

Removable 5-pin terminal strip 3.5 mm pitch

**RS-232** Receive input

RS-232 Transmit output

Logic Ground

RS-232 Clear to Send input

RS-232 Request to Send input

3kΩ, 1000pf

±5VDC

±15mA

ADC Part# L19853-XXX 15m [50ft];

RS-232 has a 6m [20ft] recommended max. ADC Part# BX-RTB05S

2.0 W

2.0 W

85g [3oz]

Do-more! Designer v2.7 or later

#### **BX-SERIO-2** Field Wiring Diagram

		RS-232	
SERIO 🚅	DTE		DTE
RS-232 GND	1 GND		GND (0V) 1
TX RXD	2 RXD		RX 2
TXD	3 TXD		TX 3
	4 RTS		RTS 4
RX CTS	5 CTS		CTS 5
			Field
BX-SERIO-2			Device

# 1-800-633-0405 **BRX Motion Control, Communications and Specialty Expansion Modules**

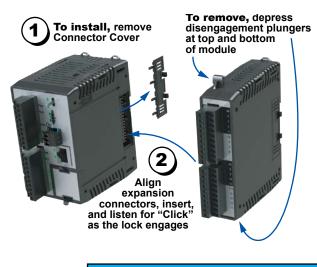
### **Overview**

One of the unique features of the BRX platform is its ability to expand its capability to fit your application solution. One of the ways the BRX platform can do this is by using expansion modules that conveniently "snap on" to the side of any BRX MPU. Once the expansion module has been snapped into place and is added to the project, it instantly adds I/O to the MPU with little to no additional setup required.

The specialty expansion modules give you the ability to add additional high-speed I/O or serial communications as needed. On the front panel of the expansion modules a color scheme and a symbol are used to denote the module type.

High-speed I/O modules have 8-point sinking/sourcing inputs and are available with 8-point sinking or sourcing outputs, all with switching frequencies up to 250kHz. The serial communications modules have 4 serial ports.

The high-speed I/O modules ship without wiring terminals. This allows you to select the termination style that best suits your application. Several wiring options are available, including screw terminal connectors and spring clamp terminal connectors. The serial communications modules ship with a terminal connector installed in each port.



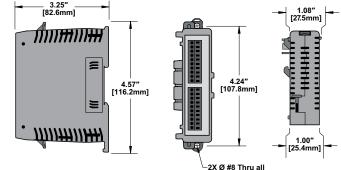
**Hot-Swapping Information** Note: This device cannot be Hot Swapped.

**General Specifications** 

All BRX high-speed input/output modules and serial communications modules have the same general specifications listed in the table below.

General Specifications			
Operating Temperature	0° to 60°C [32° to 140°F]		
Storage Temperature	-20° to 85°C [-4° to 185°F]		
Humidity	5% to 95% (non-condensing)		
Environmental Air	No corrosive gases permitted		
Vibration	IEC60068-2–6 (Test Fc)		
Shock	IEC60068-2-27 (Test Ea)		
Enclosure Type	Open Equipment		
Noise Immunity	NEMA ICS3-304		
EU Directive	See the "EU Directive" topic in the BRX Help File		
Agency Approvals	UL 61010-2 File E185989, Canada and USA, CE Compliant EN61131-2		

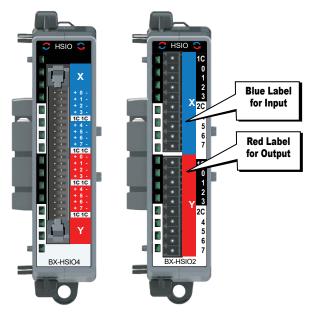
## Dimensions





**NOTE:** When removing an expansion module make sure there is room for the module to slide away from the system. Failure to do so will result in difficulty removing the module.

# 1-800-633-0405 **BRX Motion Control, Communications and Specialty Expansion Modules**



## **High-speed Input/Output Modules**

Three (3) high-speed input/output modules are available, with eight inputs and eight outputs each. High-speed I/O module faceplates have blue and red terminal bar sections to distinguish input and output terminals, respectively, and have the Symbol to signify high-speed I/O.

High-Speed Input/Output Modules					
Part Number	Input Points	Output Points	Output Type	Switching Speed	Price
BX-HSIO1	8	8	12–24 VDC Sinking	Up to 250kHz	\$229.00
<u>BX-HSIO2</u>	8	8	12–24 VDC Sourcing	Up to 250kHz	\$229.00
<u>BX-HSIO4</u>	8	8	2.5–5 VDC Sinking/Sourcing	Up to 2MHz	\$259.00

## **Serial Communications Module**

Three (3) serial communications modules are available, with four serial ports each. Serial communications module faceplates have black and white terminal sections to distinguish serial terminals, and have the <del>for symbol</del> to signify serial I/O.

Serial Communications Module				
Part Number	Ports	Port Type	Price	
BX-SERIO	4	RS-232 / RS-485	\$208.00	
BX-SERIO-2	4	RS-232 with Flow Control	\$204.00	
BX-SERIO-4	4	RS-422	\$188.00	

Expansion Module Support by Controller				
Controller Type	# Expansion Modules			
BX-DM1E-M	8			
BX-DM1-10	8			
BX-DM1E-10	8			
BX-DM1-18	8			
BX-DM1E-18	8			
BX-DM1-36	8			
BX-DM1E-36	8			
BX-DMIO*	8			
BX-EBC100*	8			
BX-MBIO*	8			

\* Remote I/O controllers do not support Motion Control and **Communications Modules.** 

