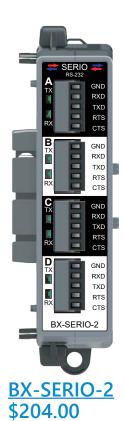
# **BX-SERIO-2** Serial Communications



4 port, RS-232 with Flow Control

Four (4) BX-RTB05S Terminal Blocks included.



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

#### **IMPORTANT!**



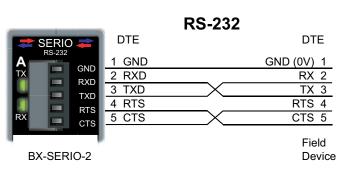


Serial Communications Specifications				
Specification	BX-SERIO-2			
Number of Ports	Four RS-232 Serial Ports			
Description	Isolated serial port that can communicate via RS-232. Includes ESD protection and built-in surge protection.			
Supported Protocols	Do-more! Protocol (Default) Modbus RTU (Master & Slave) K-Sequence (Slave) ASCII (In & Out)			
Data Rates	1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200 bps			
Default Settings	RS-232, 115200bps, No Parity, 8 Data Bits, 1 Stop Bit, Station #1			
Port Status LED	Green LED illuminated when active (TXD and RXD)			
Port Type	Removable 5-pin terminal strip 3.5 mm pitch			
RXD	RS-232 Receive input			
TXD	RS-232 Transmit output			
GND	Logic Ground			
CTS	RS-232 Clear to Send input			
RTS	RS-232 Request to Send input			
Maximum Output Load (TXD/RTS)	3kΩ, 1000pf			
Minimum Output Voltage Swing	±5VDC			
Output Short Circuit Protection	±15mA			
Cable Requirements	ADC Part# L19853-XXX			
Maximum Cable Distance	15m [50ft]; RS-232 has a 6m [20ft] recommended max.			
Replacement Connector	ADC Part# <u>BX-RTB05S</u>			
Backplane Power Consumption	2.0 W			
Heat Dissipation	2.0 W			
Weight	85g (3oz)			
Software Version	Do-more! Designer v2.7 or later			



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

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



# BRX Motion Control, Communications and Specialty Expansion Modules

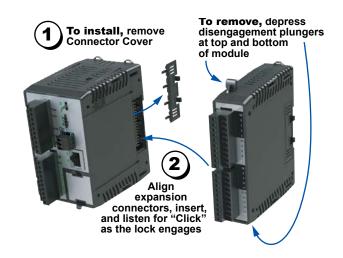
#### **Overview**

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**

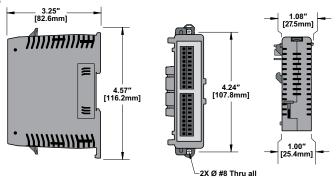
Note: This device cannot be Hot Swapped.

## **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			

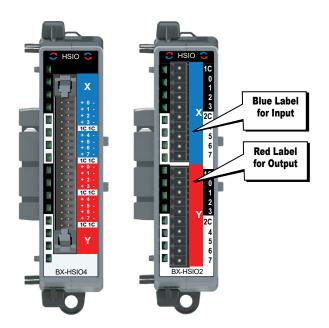
### **Dimensions**





**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.

# **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		
BX-HSIO2	8	8	12–24 VDC Sourcing	Up to 250kHz	\$229.00		
BX-HSIO4	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 symbol 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	2		
BX-DM1E-10	2		
BX-DM1-18	4		
BX-DM1E-18	8		
BX-DM1-36	4		
BX-DM1E-36	8		
BX-DMIO*	8		
BX-EBC100*	8		
BX-MBIO*	8		

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