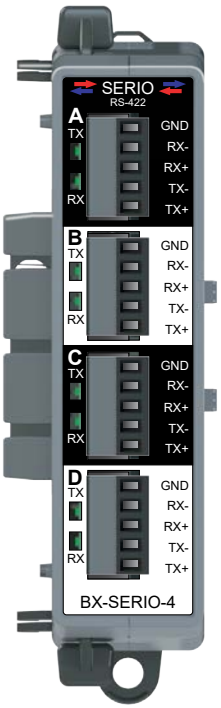
BX-SERIO-4 Serial Communications



BX-SERIO-4
$-04gi2:

4 port, RS-422

Four (4) BX-RTB05S Terminal Blocks included.

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

Serial Communications Specifications	
Specification	***BX-SERIO-4***
Number of Ports	Four RS-422 Serial Ports
Description	Isolated serial port that can communicate via RS-422. 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-422, 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
Station Addresses	1–247
TX-/RX-	RS-422 transceiver low
TX+/RX+	RS-422 transceiver high
GND	Logic Ground
Input Impedance	96kΩ
Maximum Load	1 transceiver, 19kΩ each, 120Ω termination
Output Short Circuit Protection	±250mA, thermal shutdown protection
Minimum Differential Output Voltage	2.0 VDC with 54Ω load
Maximum Common Mode Voltage	-7.5 to 12.5 VDC
Fail Safe Inputs	Logic high input state if inputs are unconnected
Electrostatic Discharge Protection	±15kV per IEC 1000-4-2
Cable Requirements	ADC Part# L19853-XXX
Maximum Cable Distance	1000m [3280ft]
Replacement Connector	ADC Part# BX-RTB05S
Backplane Power Consumption	1.2 W
Heat Dissipation	1.2 W
Weight	85g [3oz]
Software Version	Do-more! Designer v2.7 or later

IMPORTANT!

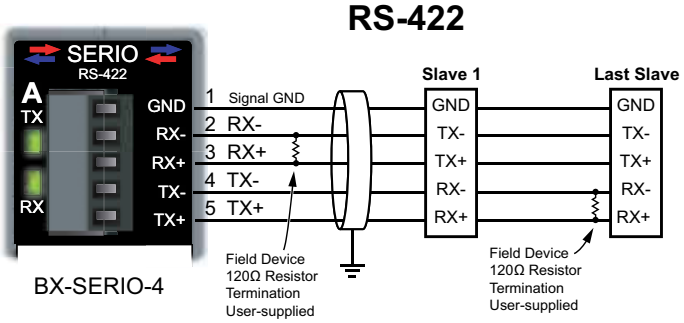
Hot-Swapping Information

Note: This device cannot be Hot Swapped.

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

NOTE: The BX-SERIO-4 supports point to point wiring only. Multi-Drop wiring is not supported.

BX-SERIO-4 Field Wiring Diagram



BRX Motion Control, Communications and Specialty Expansion Modules

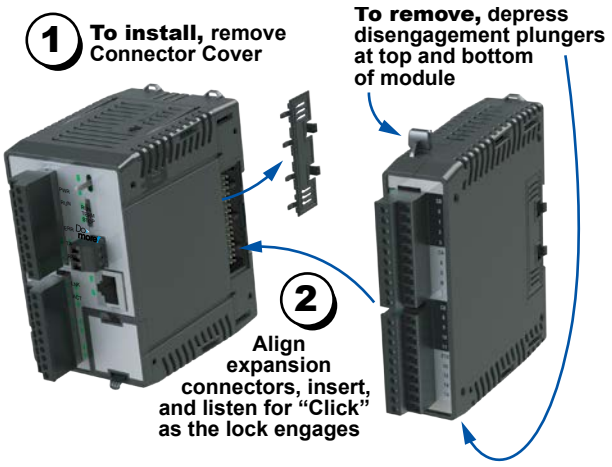
Overview

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

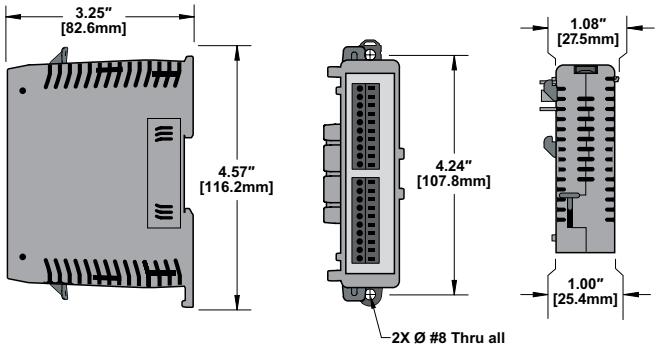
Note: This device cannot be Hot Swapped.

General Specifications

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

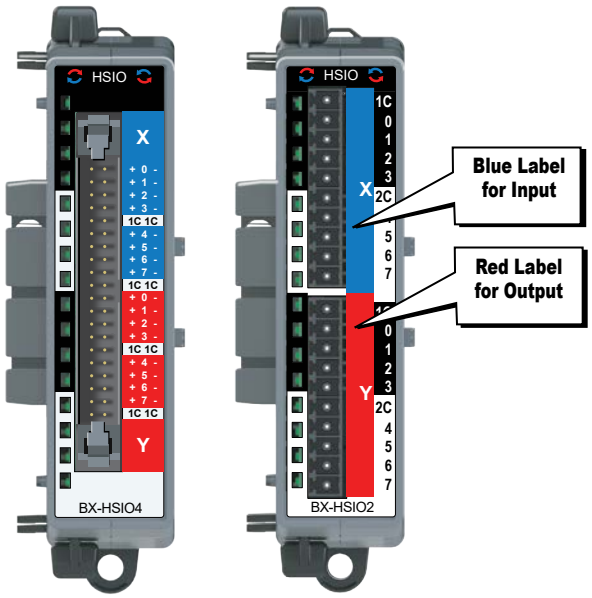
General Specifications	
Operating Temperature	0° to 60°C [32° to 140°F]
Storage Temperature	−20° to 85°C [−4° to 185°F]
Humidity	5% to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2–6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Enclosure Type	Open Equipment
Noise 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

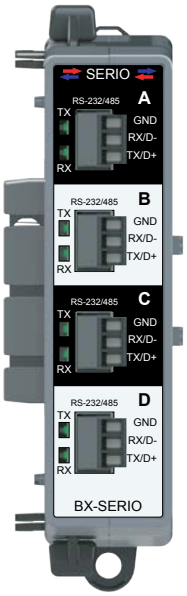
Dimensions



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	$0447u:
BX-HSIO2	8	8	12–24 VDC Sourcing	Up to 250kHz	$0447v:
BX-HSIO4	8	8	2.5–5 VDC Sinking/Sourcing	Up to 2MHz	$;04o!0:

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	$01och:
BX-SERIO-2	4	RS-232 with Flow Control	$-04gi1:
BX-SERIO-4	4	RS-422	$-04gi2:

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.**