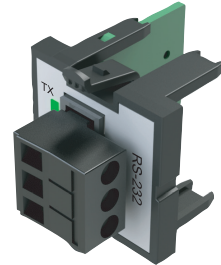


# BRX Programmable Option Modules (POM)

## BX-P-SER2-TERM \$49.00

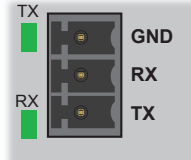
The RS-232 POM can be connected to the Do-more! Designer programming software, Modbus RTU master or slave devices,

DirectLogic PLCs via K-Sequence protocol, as well as devices that send or receive non-sequenced ASCII strings or characters.



Removable Connector Included

Pinout	RS232
1	GND
2	RX
3	TX



BX-P-SER2-TERM Specifications	
Description	Non-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 Baud
Default Settings	115200bps, No Parity, 8 Data Bits, 1 Stop Bit, Station #1
Port Status LED	Green LED is illuminated when active for TXD and RXD
Port Type	Removable 3-pin terminal strip 3.5 mm pitch
RS-232 TX	RS-232 Transmit output
RS-232 RX	RS-232 Receive input
RS-232 GND	Logic ground
RS-232 Maximum Output Load (TXD/RTS)	3kΩ, 1000pf
RS-232 Minimum Output Voltage Swing	±5V
RS-232 Output Short Circuit Protection	±15mA
Cable Requirements	RS-232 use P/N L19772-XXX from automationdirect.com
Maximum Distance	30 meters (100 feet); 6 meters (20 feet) recommended maximum
Replacement Connector	ADC Part # BX-RTB03S
Hot Swappable	Yes

## BX-RTB03S \$3.00

Replacement removable connector.



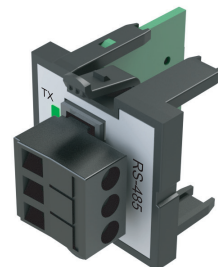
BX-RTB03S

BX-RTB03S Connector Specifications	
Part Number	BX-RTB03S
Connector Type	Screw type
Wire Exit	90-degree
Pitch	3.5 mm
Screw Size	M2
Recommended Screw Torque	<1.77 lb·in (0.2 N·m)
Screwdriver Blade Width	2.5 mm
Wire Gauge (Single Wire)	28–16 AWG
Wire Gauge (Two Wires)	28–16 AWG
Wire Strip Length	0.24 in (6mm)
Equiv. Dinkle part #	EC350V-03P-BK

# BRX Programmable Option Modules (POM)

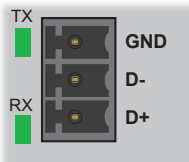
## BX-P-SER4-TERM \$49.00

The RS-485 POM can be connected to DirectLogic PLCs via K-Sequence protocol, as well as devices that send or receive non-sequenced ASCII strings or characters.



Removable Connector Included

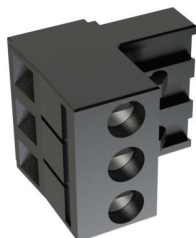
Pinout	RS485
1	GND
2	D-
3	D+



BX-P-SER4-TERM Specifications	
Description	Non-isolated Serial port that can communicate via RS-485. 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 baud
Default Settings	115200bps, No Parity, 8 Data Bits, 1 Stop Bit, Station #1, Termination resistor OFF
Port Status LED	Green LED is illuminated when active for TXD and RXD
Port Type	Removable 3-pin terminal strip 3.5 mm pitch
RS-485 Station Addresses	1–247
RS-485 D+	RS-485 transceiver high
RS-485 D-	RS-485 transceiver low
RS-485 GND	Logic ground
RS-485 Input Impedance	19kΩ
RS-485 Maximum Load	50 transceivers, 19kΩ each, 120Ω termination
RS-485 Output Short Circuit Protection	±250mA, thermal shut-down protection
RS-485 Electrostatic Discharge Protection	±8kV per IEC1000-4-2
RS-485 Electrical Fast Transient Protection	±2kV per IEC1000-4-4
RS-485 Minimum Differential Output Voltage	1.5 V with 60Ω load
RS-485 Fail Safe Inputs	Logic high input state if inputs are unconnected
RS-485 Maximum Common Mode Voltage	-7.5 V to 12.5 V
Cable Requirements	RS-232 use P/N L19772-XXX from automationdirect.com
Maximum Distance	30 meters (100 feet); 6 meters (20 foot) recommended maximum
Replacement Connector	ADC P/N BX-RTB03S
Hot Swappable	Yes

## BX-RTB03S \$3.00

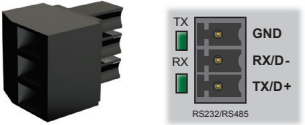
Replacement removable connector.



BX-RTB03S

BX-RTB03S Connector Specifications	
Part Number	BX-RTB03S
Connector Type	Screw type
Wire Exit	90-degree
Pitch	3.5 mm
Screw Size	M2
Recommended Screw Torque	<1.77 lb-in (0.2 N·m)
Screwdriver Blade Width	2.5 mm
Wire Gauge (Single Wire)	28–16 AWG
Wire Gauge (Two Wires)	28–16 AWG
Wire Strip Length	0.24 in (6mm)
Equiv. Dinkle part #	EC350V-03P-BK

# BRX Micro PLC Overview

Built-in RS-232/485 Port Specifications													
Port Name *	RS-232/RS-485 Serial Port												
Description	Non-isolated serial port that can communicate via RS-232 or RS-485 (software selectable). 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												
Default Settings	RS-232, 115200 bps, No Parity, 8 Data Bits, 1 Stop Bit, Station #1												
Port Type	3-pin terminal strip 3.5 mm pitch												
Port Status LED	Green LED is illuminated when active for TXD and RXD												
RS-485 Station Addresses	1-247												
Cable Recommendations	RS-232 use L19772-XXX from AutomationDirect.com RS-485 use L19827-XXX from AutomationDirect.com												
Replacement Connector	ADC Part # BX-RTB03S												
 <table border="1" data-bbox="470 777 760 922"> <thead> <tr> <th>Pinout</th> <th>RS232</th> <th>RS485</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GND</td> <td>GND</td> </tr> <tr> <td>2</td> <td>RXD</td> <td>D-</td> </tr> <tr> <td>3</td> <td>TXD</td> <td>D+</td> </tr> </tbody> </table>		Pinout	RS232	RS485	1	GND	GND	2	RXD	D-	3	TXD	D+
Pinout	RS232	RS485											
1	GND	GND											
2	RXD	D-											
3	TXD	D+											
Removable connector included.													

\*When using RS-485 a termination resistor is available and is software selectable.

CPU Status Indicators		
Indicator	Status	Description
PWR	OFF	Base Power OFF
	Green	Base Power ON
	Yellow	Low Battery
RUN	OFF	CPU is in STOP Mode
	Green	CPU is in RUN Mode
	Yellow	Forces are Active
MEM	OFF	No ROM Activity, No SD Card
	Yellow	ROM Activity (Flash or SD Card)
	Green	SD Card Installed and Mounted
ERR	Red	SD Card Installed and Not Mounted
	OFF	CPU is functioning normally
	Red	CPU Fatal Hardware Error or Software Watchdog Error

CPU Mode Switch	
RUN	CPU is forced into RUN Mode if no errors are encountered.
TERM	RUN, PROGRAM and DEBUG modes are available. In this position, the mode of operation can be changed through the Do-more! Designer Software.
STOP	CPU is forced into STOP Mode.



microSD Specifications				
Port Name	microSD Card Slot			
Description	Standard microSD socket for data logging or file read/write			
Maximum Card Capacity	32GB			
Transfer Rate (ADATA microSDHC Class 4 memory card)	Mbps	Minimum	Typical	Maximum
	Read	14.3	14.4	14.6
	Write	4.8	4.9	5.1
Port Status LED	Green LED is illuminated when card is inserted/detected			
Optional microSD Card	ADC Part # MICSD-16G			



Pin	SD
1	DAT2
2	CD/DAT3
3	CMD
4	VDD
5	CLK
6	VSS
7	DAT0
8	DAT1

AC Power Supply Specifications	
Nominal Voltage Rating	120–240 VAC
Input Voltage Range (Tolerance)	85–264 VAC
Rated Operating Frequency	47–63 Hz
Maximum Input Power	40VA
Cold Start Inrush Current	1.5A, 2ms
Maximum Inrush Current (Hot Start)	1.5A, 2ms
Internal Input Fuse Protection	Micro fuse 250V, 2A Non-replaceable
Heat Dissipation	8W Max
Isolated User 24VDC Output	24VDC @ 0.3 A max, <1V P-P Ripple, Integrated self-resetting short circuit protection
Voltage Withstand (dielectric)	1500VAC Power Inputs to Ground applied for 1 minute 1500VAC Ground to 24VDC applied for 1 minute

DC Power Supply Specifications	
Nominal Voltage Rating	12–24 VDC
Input Voltage Range (Tolerance)	10-36 VDC
Maximum Input Voltage Ripple	<± 10%
Maximum Input Power	30W
Cold Start Inrush Current	5A, 2ms
Maximum Inrush Current (Hot Start)	5A, 2ms
Internal Input Protection	Reverse Polarity Protection and Undervoltage
Heat Dissipation	3.2 W Max
Voltage Withstand (dielectric)	1500VAC Power Inputs to Ground applied for 1 minute