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Rock solid PLC hardware designed, manufactured and supported in the USA



BRX

Do more DRIVEN

Existing Do-more! projects can port over 100%

Starting at only \$199.00 (BX-DM1-10AR-D) the BRX PLC family is an extremely versatile compact stackable system that you can customize to your specific controller needs. With four different form factors, built-in high-speed inputs, interchangeable communications port, on-board analog I/O, and many I/O expansion modules available, you can build the ideal controller for your application.

Removable terminal blocks
Large 5mm pitch

External power
12-24 VDC 120-240 VAC

Customizable label window

Built-in high speed I/O

Dual-purpose discrete inputs/outputs included with up to 250kHz high-speed capability

*Additional high-speed I/O available with HSIO expansion modules

Built-in Analog I/O
Current or voltage (software selectable)

Pluggable Options Module (POM)
Add an additional Ethernet, Serial or USB port (hot swappable)

Data Logging w/ File Management
Log to microSD card or to internal RAM

Expansion port

BRX can be expanded with up to 8 expansion modules for an additional 256 discrete, 128 high-speed, or 64 analog I/O points

Built-in serial port
RS232 or RS485 software selectable

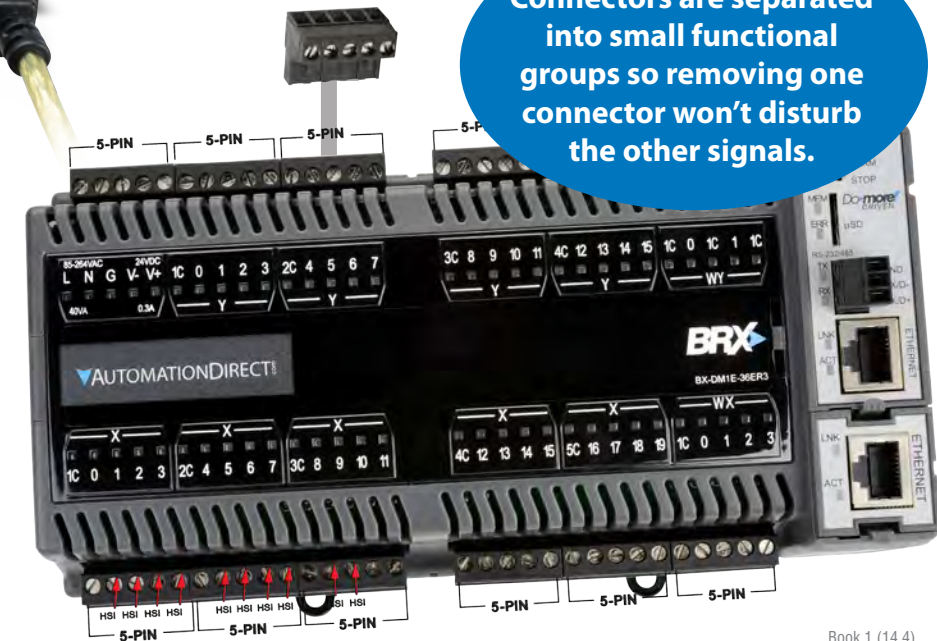
Built-in Ethernet port (select models)
10Mbps Ethernet port with Modbus TCP, MQTT, HTTP and EtherNet I/P capability

Connectors are separated into small functional groups so removing one connector won't disturb the other signals.

Panel or DIN rail mounting options

I/O terminal blocks sold separately in kits with spring clamp and screw options.

ZIPLINK connection system also available!





BRX



Over 25 years of PLC hardware design knowledge have gone into the BRX design.

Low cost options for any application

Whether your controller needs are simple or complex, the BRX platform has a cost-saving solution for you. With four form factors to choose from and many optional features available, you'll get exactly what you need at a price you didn't expect.

All BRX controllers can be DIN-rail or panel mounted and come standard with a software-selectable RS232/RS485 serial port, 1MB of internal data storage with 32GB of optional microSD storage, and a user-changeable, hot-swappable Pluggable Option Module (POM) slot. Built-in hardware interrupts are also standard and allow for precise control when timing is essential.

10-point Series starting at \$199.00



M Series starting at \$290.00



M Series

The BRX M series is a simple (no built-in I/O) controller that can be used for a variety of purposes including machine data logging and Ethernet networking. If local I/O becomes a necessity, the M series can be expanded with your choice of up to 8 expansion I/O modules. With this series, you decide exactly how much and what type of local and remote I/O your controller needs.



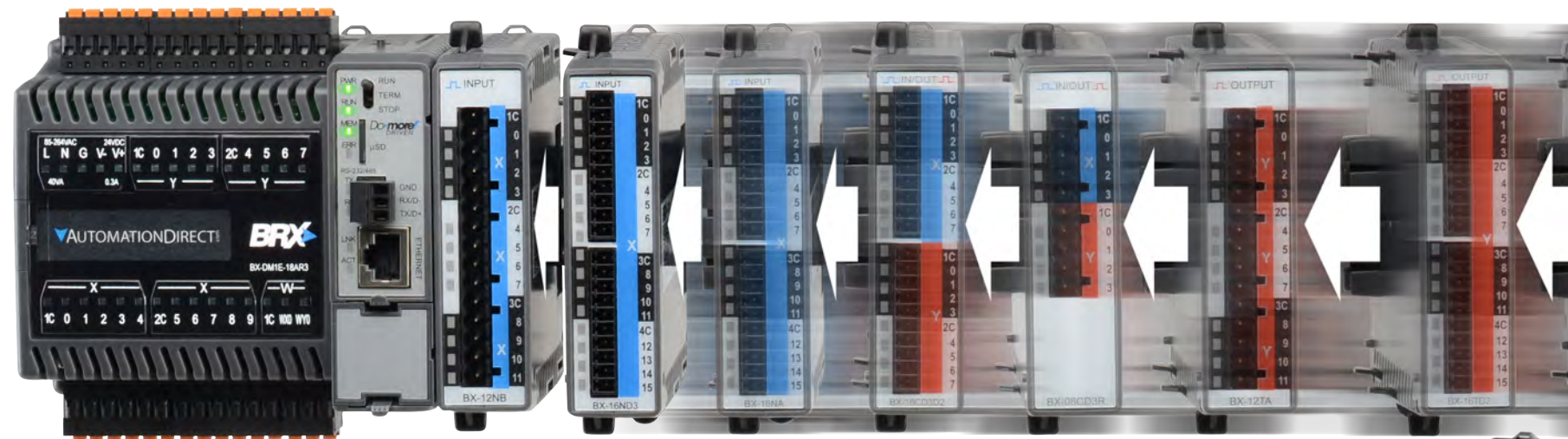
POMs for on-demand networking - purchase one or all and change as often as you need.



10-point Series

The BRX 10-point series includes all the standard features plus 10 built-in discrete I/O points (AC, DC and relay options available). With the exception of models with relay outputs, all of the on-board discrete I/O can be configured for current-protected high-speed functions up to 250 kHz. Relay output models have high-speed inputs only. Software-selectable analog I/O with your choice of 0-5VDC, 0-10VDC, +/-5VDC, +/-10VDC, 4-20mA or +/-20mA input/output ranges and a 10/100 Mbps Ethernet port are available on select units. The 10-point series is also expandable with up to 2 additional expansion I/O modules, giving you the flexibility to only add the local and remote I/O that your application needs.

18-point Series starting at **\$249.00**



18-point Series

The BRX 18-point series has all of the benefits of the 10-point series plus an additional 8 discrete I/O points for 18 total. 14 of the 18 I/O points (on non-relay models) can be utilized for high-speed I/O applications up to 250 kHz. Ethernet communication and built-in analog I/O points are also options with this series. Depending on model, the 18-point series will allow expansion with 4 to 8 additional expansion I/O modules.



Expansion is a snap!

The BRX platform requires no base or backplane and the PLC units can operate as stand-alone controllers or be expanded with up to 8 additional I/O modules (depending on model). 30 discrete I/O expansion modules are currently available with 8, 12, 16, and 32-point versions, allowing the BRX system to expand up to 292 local discrete I/O points total (with the 36-point series). 13 analog I/O modules are also available (including temperature, RTD and thermistor input modules) with up to 8 channels per module for a total of 70 local analog I/O points total (with the 36-point series). Specialty modules provide up to 128 of additional high-speed I/O points or up to 32 additional RS232/RS485 serial communications ports. The stackable design of the BRX platform gives you the ability to purchase only the I/O required for your particular application.



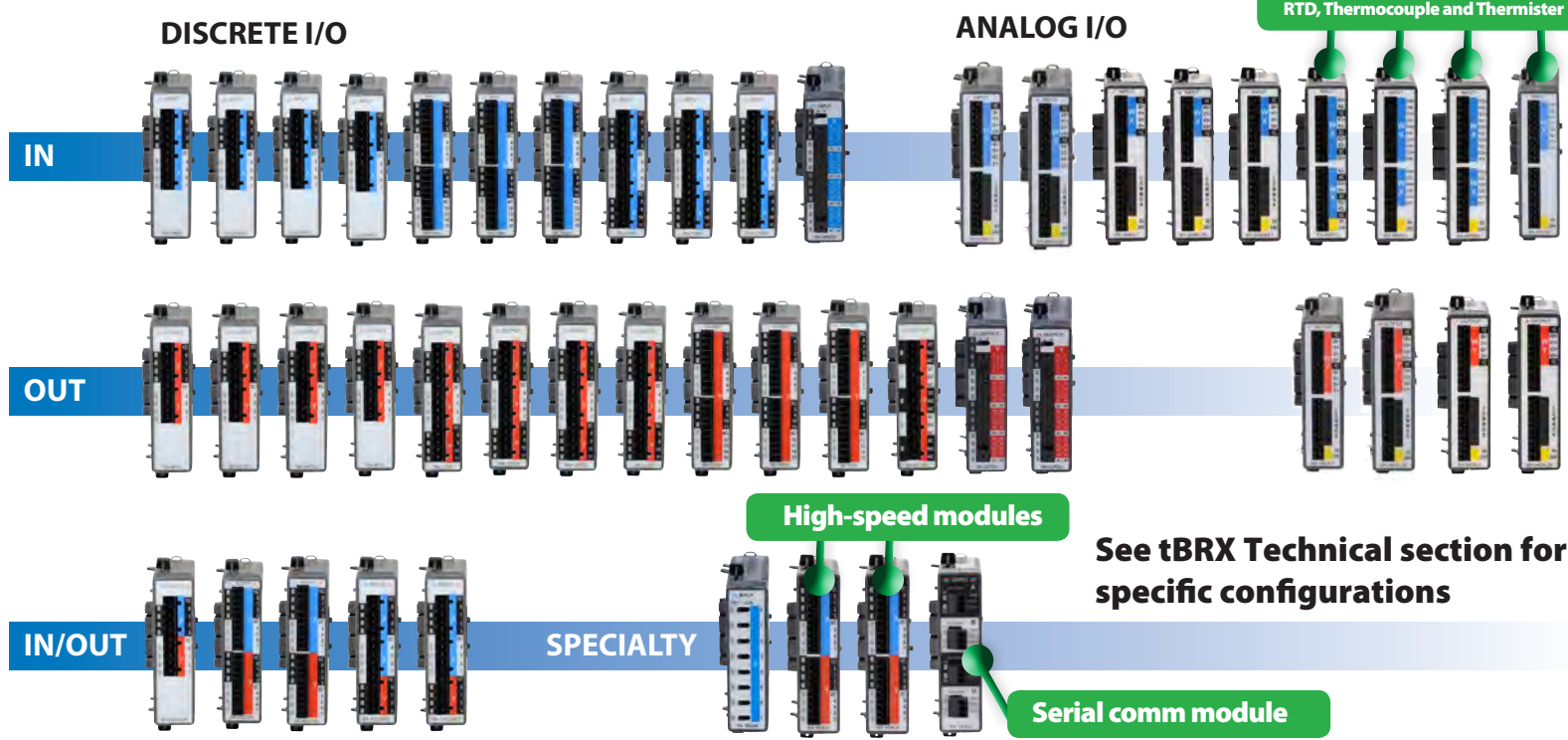
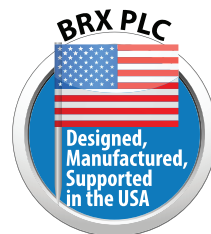
Easy to connect and easy to use, these expansion modules snap into place with an integrated, hands-free latching system. Once in place and latched, the system becomes one solid, rugged unit even without the assistance of DIN rail. Each new I/O module connected will be autoconfigured in the software and ready to use in your program. If you need to separate the expansion modules, simply use the quick release tabs to unlatch and remove.

36-point Series starting at **\$299.00**



36-point Series

The BRX 36-point series takes I/O count one step further with 36 onboard discrete I/O points, 18 of which (on non-relay models) are capable of protected 250 kHz high-speed I/O. Six user-configurable analog I/O points are available on the Ethernet capable units and the 36-point series can be expanded with 4 to 8 additional expansion I/O modules.



See tBRX Technical section for specific configurations

Over 63,000 I/O points possible with BRX remote I/O!

Do-more!



**DMIO
Controller
starting at
\$159.00**

Do-more! I/O Controller (DMIO)

The BRX Do-more! I/O controller provides easy remote expansion for any Do-more! system. Add up to 16 remote I/O racks to your application using the DMIO controller, that's over an additional 4,000 discrete or over 1,000 additional analog I/O points. When using the DMIO controller, all I/O racks will be auto-discovered and seen as native I/O to the system allowing for instant configuration.

Supported protocols:

- Do-more! Ethernet Remote I/O - use with any Do-more! controller

DirectLOGIC



**EBC100
Controller
starting at
\$249.00**

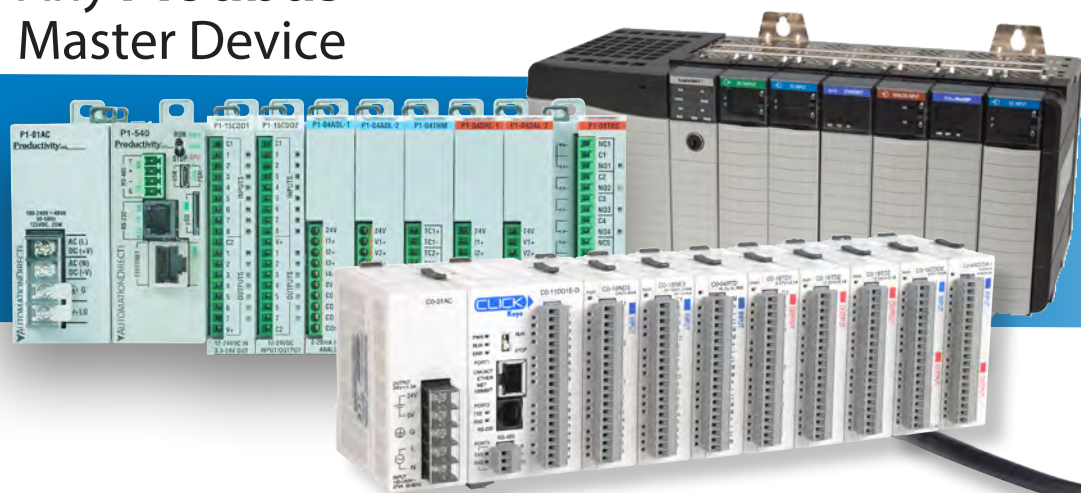
Ethernet Base Controller (EBC100)

The BRX Ethernet Base Controller can be used to expand any system using DirectLOGIC H2-ERM100s/H4-ERM100s, any Do-more! system, and can also be used as a Modbus TCP Server. Up to 16 remote EBC100 racks can be used with DirectLOGIC or Do-more! systems and 247 EBC100 racks can be added when using Modbus TCP. That is over an additional 63,000 discrete I/O points! The remote I/O will be seen as native to the system unless using Modbus TCP, then the Modbus Read/Write instructions are required for receiving/sending I/O data.

Supported protocols:

- Do-more! Ethernet Remote I/O - use with any Do-more! controller
- Host Ethernet Remote I/O - use with H2-ERM100s/H4-ERM100s
- Modbus TCP - use with Modbus TCP Client

**Any Modbus®
Master Device**



**MBIO
Controller
starting at
\$234.00**

Modbus I/O Slave Controller (MBIO)

The BRX Modbus I/O slave controller allows any system with a Modbus master/client to expand its I/O capacity. Supporting both Modbus RTU and Modbus TCP protocols, this controller provides up to 31 additional Modbus RTU remote I/O racks and 247 additional Modbus TCP remote I/O racks. With the Modbus TCP option, over 63,000 extra discrete I/O points are possible. When using the MBIO slave controller, I/O data is sent to/from the master using Modbus Read/Write commands. The MBIO slave controller is great for remote expansion with other AutomationDirect PLCs or as a low-cost alternative for 3rd party controllers that support Modbus mastering.

Supported protocols:

- Modbus RTU - use with Modbus RTU Master
- Modbus TCP - use with Modbus TCP Client



5-second wiring system for BRX!



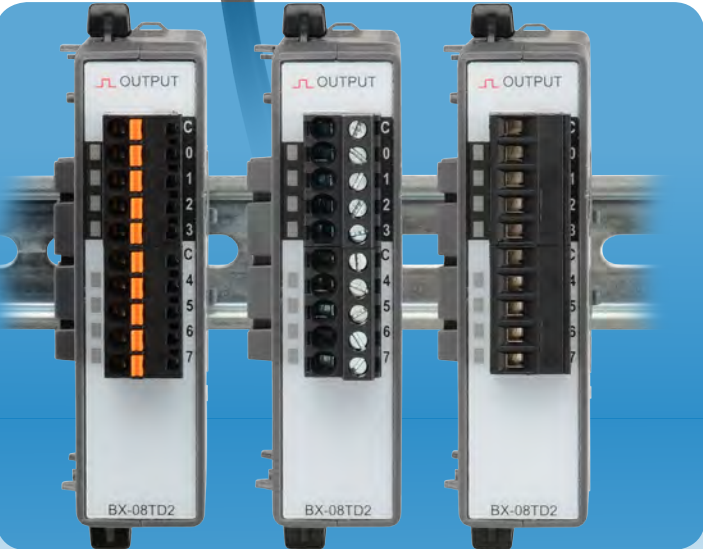
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ZIPLink Modules
 Save time by using pre-wired cables

Why spend the time wiring each I/O point to a terminal when you can get them prewired? ZIPLink pre-wired cables and terminals save you valuable time, keep your installation clean and efficient, and use half the space at a fraction of the cost of standard terminal blocks.



180° Spring Clamp 180° Screw 90° Screw

Terminal blocks not included with BRX CPU purchase
Each variation of BRX terminal blocks can be purchased separately in kits to save time

Terminate frustration and wire the easy way...

The BRX PLC system components (excluding the BX-SERIO module or any of the Temperature modules) do not ship with pre-selected I/O terminal blocks. This allows you to select the termination that best fits your application and allows you to only pay for the termination you use.

The BRX PLC platform offers several options when it comes to wire terminations. We want wiring to be as painless as possible, and by far the easiest route to take is our ZIPLinks pre-wired solution. ZIPLink modules and cables are available for most BRX system components and they not only provide tremendous wiring time savings but can also provide clean wireways with easy field-traceable connections, and confidence that your panel wiring is correct.

If you decide to use the standard terminal blocks with your BRX controller, they are available separately in easily-removable 90 and 180-degree screw clamp or 90-degree spring clamp versions.

ZIPLink Modules starting at \$20.50



With the larger BRX PLCs (18 and 36-point units) and the expansion modules, a wider (5mm) spaced connector is provided for easy insertion of large MTW wires. Don't cram your bigger gauge wires into PLC clamps that are too small ever again. With BRX, even wiring is better!

BRX - Your Automation Foundation

BRX PLCs offer PWM outputs that can be used to control DC motors, valves, pumps or LED lighting



Start small, build BIG

From the start, we wanted the BRX PLC platform to offer the options needed for any project design, from a small machine to a complex process. But that wasn't good enough! We also wanted BRX PLCs to change and grow right along with the project - through design, build, testing, installation, startup and future expansion phases. That's why the BRX PLC platform allows for easy system modifications to meet your needs and keep you satisfied long after the initial design.

The BRX platform provides hassle-free I/O expansion for up to 292 discrete, or 70 analog points locally with thousands more available through remote expansion, hot-swappable POMs for on-demand networking modifications, and expandable data logging from the included 1MB RAM to 32GB with the addition of a micro SD card. With these features and a starting price of \$199.00, you can start small and build something BIG. That's why we call the Do-more! BRX PLC platform your "Automation Foundation"



Get in motion...it's easy with BRX

All BRX PLC models with 24VDC I/O have high-speed inputs and outputs built in with an additional 128 local high-speed points possible through expansion. This high-speed I/O can be used to track rapid encoder pulses, drive stepper motors, or can be configured for other counter/timer, axis/pulse, pulse-width-modulated or table-driven functions:

- **Timer/Counter:** BRX PLCs can be configured to count input pulses, or measure the time between pulses, up to a 250kHz maximum pulse rate.
- **Axis/Pulse:** BRX PLCs can have up to three axis of control with an additional virtual axis for internal control and following applications.
- **Pulse Width Modulation (PWM):** The high-speed outputs can also be used to generate a carrier frequency with varying pulse widths.
- **Table-driven:** Tables of preset values can be used to turn the high-speed outputs ON and OFF based on the pulse count values of one high-speed input.

Up to 146 high-speed I/O channels are possible, capable of handling or producing up to 250kHz signals



With the BRX PLCs you get integrated motion control at an unheard-of price. Starting at under \$300

The BRX PLC platform not only makes motion affordable but also user-friendly. The Do-more Designer software includes many motion-based instructions that vary in complexity from simple move profiles to electronic cam tables. With BRX, you get the exact motion control you need without any frustrating obstacles.