



### Applications

- Ideal for smaller facilities, remote sites, and for distributing control and monitoring throughout large facilities.
- Supports a wide range of field buses for connection to remote I/O and stand-alone controllers.
- Serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet, or dial-up modem. In larger facilities, multi-building applications and large-scale control system integrations, the EC-Net<sup>AX</sup> Supervisor software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of EC-BOS<sup>AX</sup> devices into a single unified application.
- Using EC-Net<sup>AX</sup> Supervisor, you can manage global control functions, support data passing over multiple networks, connect to enterprise level software applications, and host multiple, simultaneous client workstations connected over the local network, the Internet, or dial-up modem.

### Overview

The EC-BOS-2<sup>AX</sup> is a compact, embedded controller/server platform. It combines integrated control, supervision, data logging, alarming, scheduling and network management functions with Internet connectivity and web serving capabilities in a small, compact platform. The EC-BOS-2<sup>AX</sup> makes it possible to control and manage external devices over the Internet and present real time information to users in web-based graphical views.

The EC-BOS-2<sup>AX</sup> is part of the EC-Net<sup>AX</sup> suite of Java-based controller/ server products, software applications and tools, which are designed to integrate a variety of devices and protocols into unified, distributed systems. EC-Net<sup>AX</sup> products are powered by the Niagara<sup>AX</sup> Framework®, the industry's first software technology designed to integrate diverse systems and devices into a seamless system. EC-Net<sup>AX</sup> supports a wide range of protocols including LONWORKS®, BACnet® and Internet standards. EC-Net<sup>AX</sup> also includes integrated network management tools to support the design, configuration, installation and maintenance of interoperable networks.

Special Note: The number of external devices supported by the EC-BOS-2<sup>AX</sup> is dependant on the memory option used on the EC-BOS-2<sup>AX</sup> and on the number and types of external devices used. Please refer to Tech Note 202 on our web site at [www.distech-controls.com](http://www.distech-controls.com) for more details.

### Features & Benefits

- Supports open and legacy protocols.
- Web User interface (optional) serves rich graphical presentations for easier and more user-friendly control of control system integrations.
- Integral energy management routines.
- Run stand-alone control, energy management and integration applications.
- Supports two optional communications boards.
- Small compact design is easy to install and supports multiple power options
- Optional I/O Modules.
- Includes oBIX client/server and Niagara Network (Fox) client/server drivers
- BTL listed when BACnet driver is used. Complies with B-BC (BACnet Building Controller)

## Recommended Peripherals

### EC-Net<sup>AX</sup> I/O Modules<sup>1</sup>



#### EC-Net<sup>AX</sup> IO-16:

- 8 universal inputs
- 4 form A relay outputs
- 4 analog outputs (0-10VDC)
- Up to four (4) IO-16 can be connected to the EC-BOS-2<sup>AX</sup>



#### EC-Net<sup>AX</sup> IO-34:

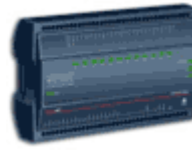
- 16 universal inputs
- 10 form A relay outputs
- 8 analog outputs (0-10VDC)
- Maximum one (1) IO-34 can be connected to the EC-BOS-2<sup>AX</sup>
- In addition to the IO-34, up to two (2) IO-16 can also be connected to the EC-BOS-2<sup>AX</sup>

### Distech Controls I/O Modules<sup>2</sup>



#### ECC-301:

- 8 universal inputs
- 8 triac outputs



#### ECC-401:

- 12 universal inputs
- 12 triac outputs



#### ECC-520:

- 16 universal inputs

### Other Products (Hardware)



EC-NPB-LON	78Kbps FTT-10A LON adapter
EC-NPB-MDM	56Kbps Modem option card
EC-NPB-2X-485	Dual port RS-485 option card
EC-NPB-PWR	24V AC/DC, 50/60Hz Power Supply Module. DIN rail mountable
EC-NPB-PWR-UN	90-263VAC/15VDC, 50/60Hz Universal Power Supply Module. DIN rail mountable
EC-WPM-US	90-240VAC, 50/60Hz Wall adapter U.S. plug type
EC-WPM-EUR	90-240VAC, 50/60Hz Wall adapter European/Asian plug type
EC-WPM-UK	90-240VAC, 50/60Hz Wall adapter U.K. plug type
EC-NPB-GPRS	GPRS Modem option card

### Other Products (Software)

EC-DR-LON <sup>AX</sup>	LONWORKS driver
EC-DR-MSTP <sup>AX</sup>	Driver for MS/TP BACnet communications over RS-232 or RS-485 port
EC-DR-BACnet <sup>AX</sup>	BACnet IP Client over Ethernet
EC-NPM-128	Extended memory part for 64Mb to 128Mb
EC-UI-SP-2XX	Web User Interface add-on
EC-NC-SP-2XX	Niagara Connectivity Station Pack
EC-WP <sup>AX</sup> -WEB	Embedded EC-Net <sup>AX</sup> Pro (requires EC-UI-SP-2XX)

For more information on these or other Distech Controls products please refer to our web site at [www.distech-controls.com](http://www.distech-controls.com) or contact [sales@distech-controls.com](mailto:sales@distech-controls.com).

1. For more information and details, please refer to the *EC-Net<sup>AX</sup> I/O Modules datasheet*.

2. For more information, please refer to the *Remote I/O datasheet*.

## Product Specifications<sup>3</sup>

### Platform

Processor:	IBM PowerPC 405EP 250MHz processor
Memory:	64MB <sup>4</sup> SDRAM and 64MB Serial Flash
Battery Backup:	5 minutes typical. Shutdown begins within 10 secs.
Real-Time Clock:	3 month backup max via battery

### Communications

- Methods:
- 2 Ethernet Ports – 10/100Mbps (RJ-45 connectors)
  - 1 RS-232 Port (9-pin D-shell connector)
  - 1 RS-485 non-isolated port (3 screw connector on base board)
  - 1 One 20-Pin Euro-DIN Connector (for I/O and Power modules)
  - 2 communication card option slots

### Operating Systems

- Types:
- QNX RTOS
  - IBM J9 JVM Java Virtual Machine
  - Niagara<sup>AX</sup>

### Chassis

Construction:	Plastic, din rail or screw mount chassis, plastic cover
Cooling:	Internal air convection
Dimensions:	16.0cm (6.3") W x 12.2cm (4.8") H (including connectors) x 6.2cm (2.4") D
Weight:	0.708 Kg (1 lb 9 oz)

### Environment

Operating Temp.:	0°C to 50°C (32°F to 122°F)
Storage Temp.:	0°C to 60°C (32°F to 140°F)
Relative Humidity:	5% to 95%, non-condensing

### Agency Listings

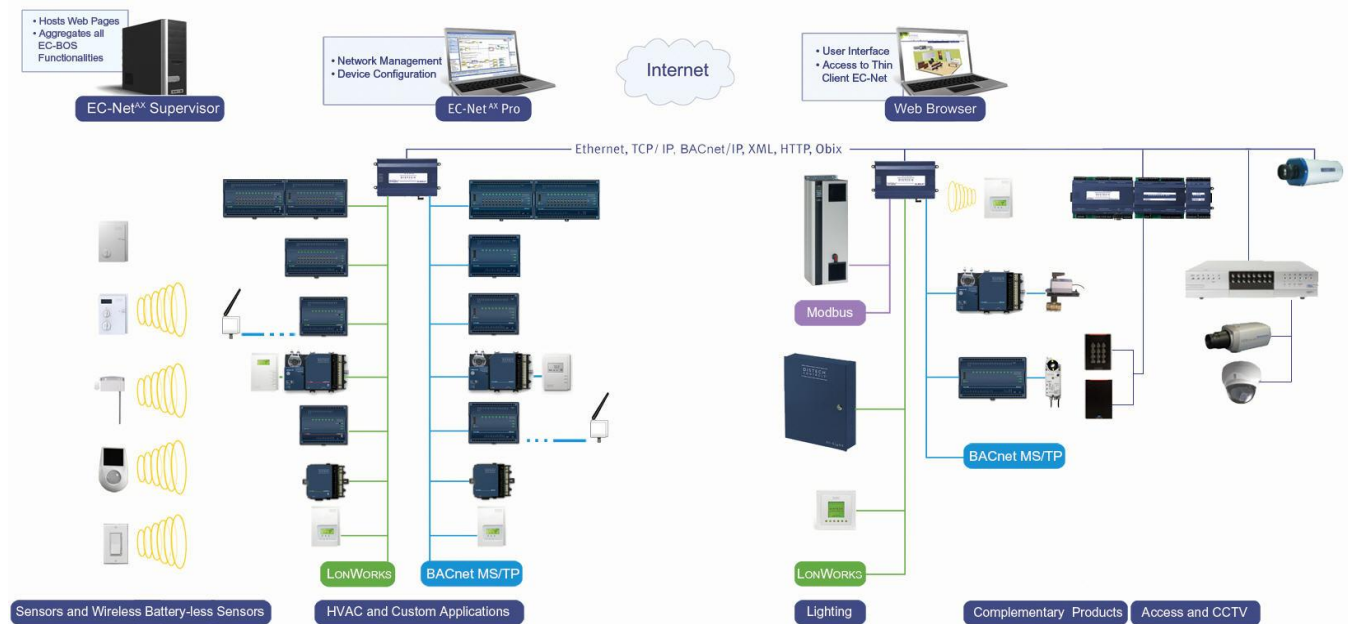
UL:	UL916 C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment" For details, refer to <i>EC-BOS-2<sup>AX</sup> Mounting and Wiring Instructions</i>
CE:	
FCC:	Part 15 Class A



3. For more detailed specifications please refer to the *EC-BOS-2<sup>AX</sup> Mounting and Wiring Instructions*.  
4. Can be upgraded to 128MB with EC-NPM-128 option.

## Typical Architecture

Truly Open Solutions Provide Flexibility with Interoperability Now and in the Future.



## Product Warranty & Total Quality Commitment

All Distech Controls product lines are built to meet rigorous quality standards and carry a two-year warranty. Distech Controls is an ISO 9001 registered company.

### Specifications subject to change without notice.

Distech Controls and the Distech Controls logo are trademarks of Distech Controls, Inc.; Niagara<sup>AX</sup> Framework is a trademark of Tridium Inc.; LONWORKS is a registered trademark of Echelon Corporation; BACnet is a registered trademark of ASHRAE; BTL is a registered trademark of the BACnet Manufacturers Association; all other trademarks are property of their respective owners. Products or features contained herein may be covered by one or more U.S. or foreign patents.



05DI-DSBS2AX-40

EC-BOS-2<sup>AX</sup>

www.distech-controls.com