



### Overview

The EC-BOS-6<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-6<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-6<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<sup>®</sup>, the industry's first software technology designed to integrate diverse networks and devices into a seamless system. Furthermore, EC-Net<sup>AX</sup> supports a wide range of protocols including LONWORKS<sup>®</sup>, BACnet<sup>®</sup> and Internet standards. In all, EC-Net<sup>AX</sup> includes integrated network management tools to support the design, configuration, installation and maintenance of interoperable networks.

### 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> controllers 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.

### Features & Benefits

- Supports open and legacy protocols.
- Web User interface (optional) serves rich graphical presentations for easier and more user-friendly management 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).

## Available Options

### EC-BOS-6<sup>AX</sup> models<sup>1</sup>



#### EC-BOS-630

- 48MB Java heap memory
- 450K resource limit
- 200 points max/network

#### EC-BOS-640

- 48MB Java heap memory
- 1000K resource limit

#### EC-BOS-650

- 48MB Java heap memory
- No license restrictions

#### EC-BOS-660

- 96MB Java heap memory
- No license restrictions

### EC-Net<sup>AX</sup> I/O Modules<sup>2</sup>



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

- 16 point I/O module
- 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-6<sup>AX</sup>



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

- 34 point I/O module
- 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-6<sup>AX</sup>
- In addition to the IO-34, up to two (2) IO-16 can also be connected to the EC-BOS-6<sup>AX</sup>
- Built-in 24V AC/DC Power Supply Module

### Distech Controls Programmable Controllers



#### ECP-300

- 10 universal inputs
- 8 universal outputs
- 14 wireless inputs<sup>3</sup>



#### ECP-400 Series

- 12 universal inputs
- 12 universal outputs
- Option to have some triac outputs
- 14 wireless inputs<sup>3</sup>
- Option to have HOA switches
- Built-in 15V DC Power Supply



#### ECP-500 Series

- 16 universal inputs
- 12 universal outputs
- 14 wireless inputs<sup>3</sup>
- Option to have HOA switches
- Built-in 15V DC Power Supply

### Other Products (Hardware)

EC-NPB-LON	78Kbps FTT-10A LON <sup>®</sup> adapter (uses one of the two communication slots in the EC-BOS-6 <sup>AX</sup> )
EC-GPRS-CBL-EXT	2 meter (~6 ft.) antenna cable and bracket for modem
EC-NPB-GPRS	Plug-in GPRS modem card
RS 485 Card	Plug-in RS-485 card (2 ports)
RS 232 Card	Plug-in RS-232 card
EC-WPM-EU	90-240VAC, 50/60Hz wall adapter European/Asian plug type (not required with purchase of IO-34)
EC-WPM-UK	90-240VAC, 50/60Hz wall adapter U.K. plug type (not required with purchase of IO-34)
PMD2VA	85-264VAC/15VDC, 47/63Hz DIN rail mountable Power Supply Module

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

1. All EC-BOS-6<sup>AX</sup> models include a web user interface, embedded workbench, and all of the open drivers.
2. For more information and details, please refer to the *EC-Net<sup>AX</sup> I/O Modules datasheet*.
3. Available when the Wireless Receiver module is connected to the controller.

### 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. Distech Controls' products provide both the contractor and the end user with the flexibility of using "best-of-breed" products in system design.

## Product Specifications<sup>4</sup>

### Platform<sup>5</sup>

Processor:	IBM PowerPC 440 524MHz processor
Memory:	256MB DDR RAM and 128MB 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 20-Pin Euro-DIN Connector (for I/O and Power modules)
  - 2 communication card option slots
  - 1 USB Port

### Operating Systems

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

### 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 70 °C (32°F to 158 °F)
Relative Humidity:	5% to 95%, non-condensing

### Agency Listings

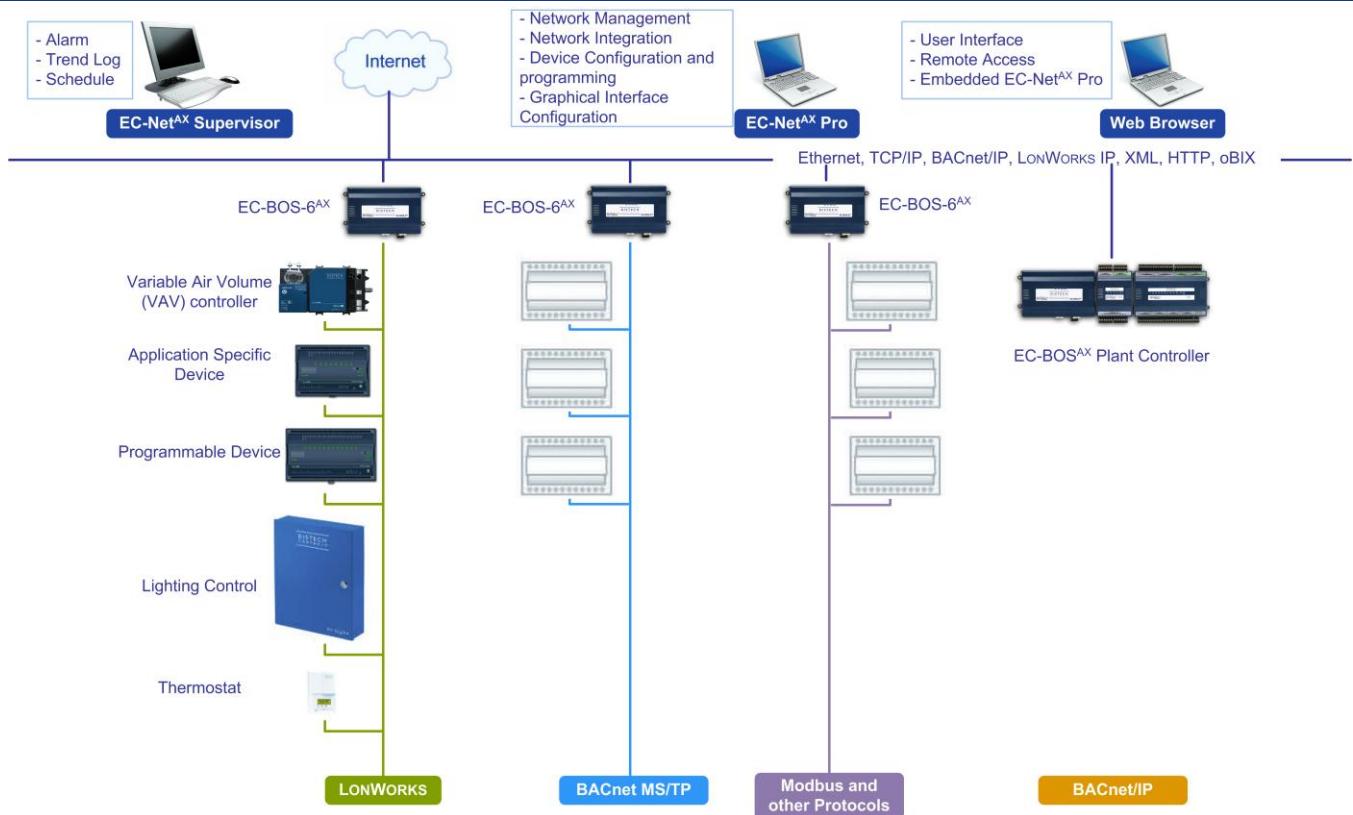
UL:	UL916 C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment" For details, please refer to the <i>EC-BOS-6<sup>AX</sup> Mounting and Wiring Instructions</i> Part 15 Class A
CE:	
FCC:	



4. For more detailed specifications please refer to the *EC-BOS-6<sup>AX</sup> Mounting and Wiring Instructions*.

5. Requires Niagara<sup>AX</sup> version 3.2 or higher.

## Typical Architecture



**Specifications subject to change without notice.**

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EC-BOS-6<sup>AX</sup>

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