



Overview

The EC-BOS-2^{AX} 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^{AX} 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^{AX} is part of the EC-Net^{AX} 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^{AX} products are powered by the Niagara^{AX} Framework®, the industry's first software technology designed to integrate diverse networks and devices into a seamless system. Furthermore, EC-Net^{AX} supports a wide range of protocols including LONWORKS®, BACnet® and Internet standards. In all, EC-Net^{AX} 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^{AX} Supervisor software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of EC-BOS^{AX} controllers into a single unified application.
- Using EC-Net^{AX} 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-2^{AX} models¹



EC-BOS-220

- 16MB Java heap memory
- 350K resource limit
- 8 points max/network
- 34 points max NDIO
- Two networks (one of which is Niagara^{AX})

EC-BOS-230

- 16MB Java heap memory
- 450K resource limit
- 200 points max/network

EC-BOS-240

- 16MB Java heap memory
- No license restrictions

EC-BOS-250

- 48MB Java heap memory
- No license restrictions

EC-Net^{AX} I/O modules²



EC-Net^{AX} 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-2^{AX}



EC-Net^{AX} 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-2^{AX}
- In addition to the IO-34, up to two (2) IO-16 can also be connected to the EC-BOS-2^{AX}
- Built-in 24V AC/DC Power Supply Module

Distech Controls Programmable Controllers



ECP-300

- 10 universal inputs
- 8 universal outputs
- 14 wireless inputs³



ECP-400 Series

- 12 universal inputs
- 12 universal outputs
- Option to have some triac outputs
- 14 wireless inputs³
- Option to have HOA switches
- Built-in 15V DC Power Supply



ECP-500 Series

- 16 universal inputs
- 12 universal outputs
- 14 wireless inputs³
- Option to have HOA switches
- Built-in 15V DC Power Supply

Hardware options & accessories

EC-NPB-LON	78Kbps FTT-10A LON [®] adapter (uses one of the two communication slots in the EC-BOS-2 ^{AX})
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 or contact sales@distech-controls.eu.

1. All EC-BOS-2^{AX} 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^{AX} 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 Specifications⁴

Platform

Processor:	IBM PowerPC 405EP 250MHz processor
Memory:	128MB SDRAM and 64MB Serial Flash
Battery Backup:	5 minutes typical; shutdown begins within 10 secs
Real-Time Clock:	3 month battery backup

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

Operating Systems

- Types:
- QNX RTOS
 - IBM J9 JVM Java Virtual Machine
 - Niagara^{AX} 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

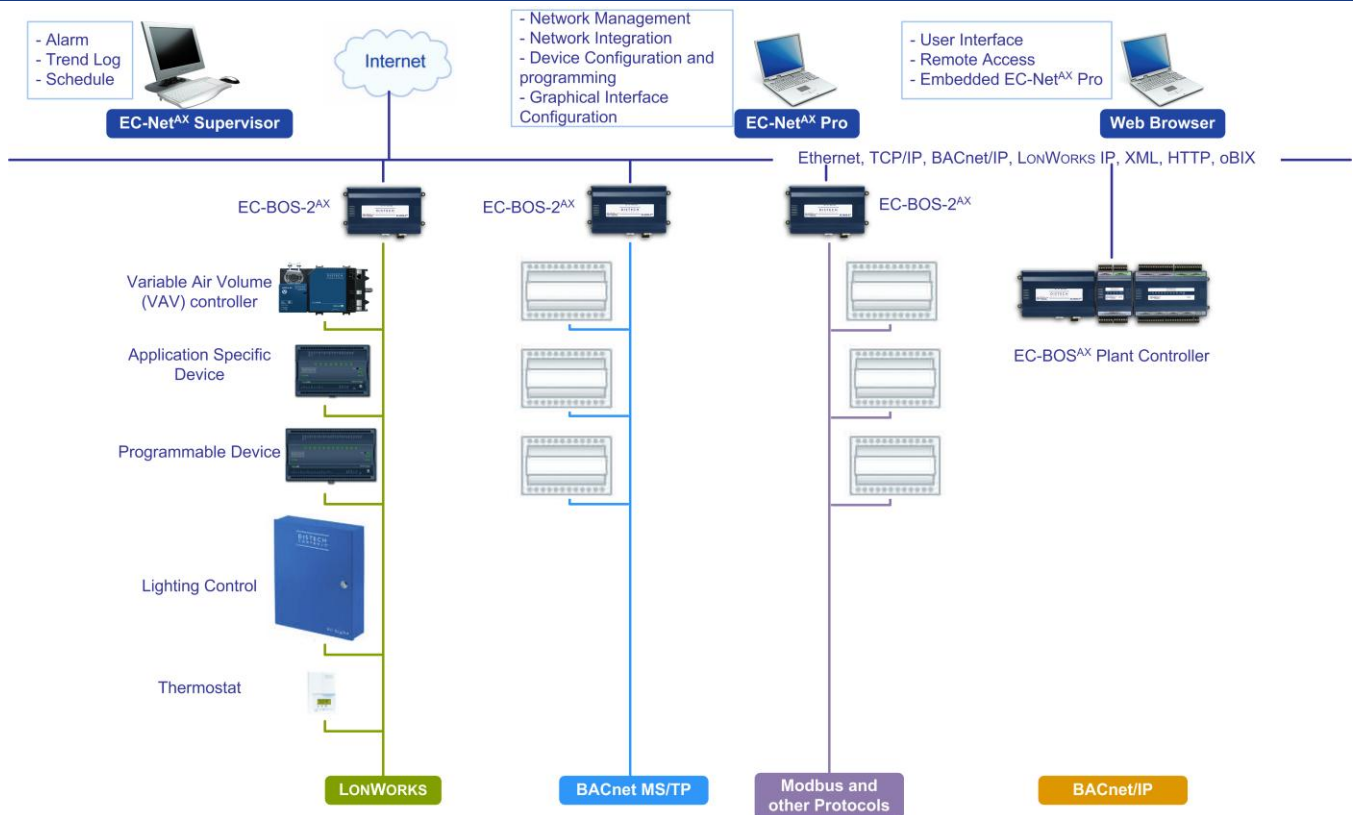
Agency Listings

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-2^{AX} Mounting and Wiring Instructions</i>
CE:	For details, please refer to the <i>EC-BOS-2^{AX} Mounting and Wiring Instructions</i>
FCC:	Part 15 Class A



4. For more detailed specifications, please refer to the *EC-BOS-2^{AX} Mounting and Wiring Instructions*.

Typical Architecture



Specifications subject to change without notice.

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