

# EC-BOS-8

## Multi-Protocol Web Building Controller



## Overview

The EC-BOS-8 is a compact, embedded controller and server platform for connecting multiple and diverse devices and sub-systems. With Internet connectivity and Webserving capability, the EC-BOS-8 provides integrated control, supervision, data logging, alarming, scheduling and network management. It streams data and graphical displays to a standard Web browser via an Ethernet or wireless LAN, or remotely over the Internet.

The EC-BOS-8 operates with EC-Net™ 4 web-based building management platform powered by the Niagara Framework®.

## Features & Benefits

- Scalable licensing model and modular hardware make the EC-BOS-8 suitable for installation in small buildings, as well as large multi-unit campuses when combined with EC-Net Supervisor
- Integrates many communication protocols and automation systems including HVAC, lighting, energy, fire & smoke, physical access, video and industrial/processing
- Two on-board isolated RS-485 ports for connecting to various common networks, e.g. BACnet MS/TP, Modbus RTU, Wiegand access control devices
- Option modules for additional physical network connections, e.g. LONWORKS® FTT-10A, RS-232, RS-485, and Wiegand access readers
- USB type A port for station backup and restore functions

# Model Selection

To order a fully functional EC-BOS-8, the following three components are required: EC-BOS-8, Core Software, Software Maintenance Agreement (SMA). If ordering a demo core, an SMA is not required. Refer to the [EC-Net Selection Tool](#) to calculate the required components.

## EC-BOS-8 Series

**Example:** EC-BOS-8 with Worldwide WiFi

Series	WiFi Setting <sup>1</sup>
<b>EC-BOS-8:</b> EC-BOS-8 includes two isolated RS485 ports, two 10/100MB Ethernet ports and USB Backup & Restore.	<b>With Worldwide WiFi:</b> Worldwide WiFi setting for enabling WiFi on EC-BOS-8 units installed anywhere in the world except the US. <b>With Permanently Disabled WiFi:</b> WiFi setting for permanently disabling WiFi on EC-BOS-8 units.

1. Refer to the [EC-BOS-8 Global Shipping Guide](#) for more information.

## EC-BOS-8 Core Software

**Example:** EC-BOS-8 Core - 5000 Points

Series	Points <sup>1</sup>
<b>EC-BOS-8 Core:</b> EC-BOS-8 core software. Includes standard open drivers. Requires EC-Net 4.1 or higher. Software Maintenance Agreement (SMA) must be purchased in conjunction with core software.	<b>100 Points:</b> Supports up to 100 points. <b>250 Points:</b> Supports up to 250 points. <b>500 Points:</b> Supports up to 500 points. <b>1250 Points:</b> Supports up to 1250 points. <b>5000 Points:</b> Supports up to 5000 points. <b>10000 Points:</b> Supports up to 10000 points.
<b>EC-BOS-8 Core – Demo:</b> EC-BOS-8 core software. Includes all available drivers. Supports up to 25000 points. Runs on EC-Net 4.1 or higher and EC-Net <sup>AX</sup> (minimum v3.8.111). Note: This license expires annually, and its renewal is covered by the EC-Net Support Fee.	N/A

1. Points cannot be added to the Demo version (EC-BOS-8 Core – Demo) of the EC-BOS-8 core software.

For more information regarding the EC-Net drivers currently offered by Distech Controls, refer to the [EC-Net Drivers Reference Guide](#).

## EC-BOS-8 Software Maintenance Agreement

Software maintenance is required when purchasing an EC-BOS-8. The minimum initial software maintenance plan is 18 months. Optional 3- or 5-year maintenance may be substituted.

If Maintenance coverage is not purchased for any period, the price of Maintenance for the next period for which it is purchased will be (a) the Maintenance fee for the period(s) for which Maintenance was not purchased, up to a maximum of 5 years; and (b) the Maintenance fee for the next year.

These software maintenance plans are ordered separately according to the EC-BOS-8 model chosen. See the price list for more details. Take advantage of the Asset Manager online tool to receive notifications about SMA expirations and Enterprise SMA to align all SMA expiration dates to a single one for the entire system.

**Example:** EC-BOS-8 (250 points) 3 year SMA

Series	Software Maintenance Agreement
<b>EC-BOS-8 (250 points)</b>	<b>18 month SMA:</b> Initial 18-month software maintenance agreement. Must be purchased in conjunction with initial core software. Optional 3 or 5 year maintenance may be substituted.
<b>EC-BOS-8 (500 points)</b>	<b>1 year SMA:</b> 1-year software maintenance agreement (includes new and interim releases).
<b>EC-BOS-8 (1250 points)</b>	<b>3 year SMA:</b> 3-year software maintenance agreement (includes new and interim releases).
<b>EC-BOS-8 (5000 points)</b>	<b>5 year SMA:</b> 5-year software maintenance agreement (includes new and interim releases).
<b>EC-BOS-8 (10000 points)</b>	

## EC-BOS-8 Integration Pack

**Example:** EC-BOS-8 Integration Pack - 1250

Series	Points
<b>EC-BOS-8 Integration Pack:</b> EC-BOS-8 integration pack purchased in conjunction with initial core software.	<b>500:</b> Adds support for additional 500 points to core software. <b>1250:</b> Adds support for additional 1250 points to core software. <b>2500:</b> Adds support for additional 2500 points to core software.

## EC-BOS-8 Upgrade Pack

**Example:** EC-BOS-8 Upgrade Pack - 25

Series	Points
<b>EC-BOS-8 Upgrade Pack:</b> EC-BOS-8 upgrade pack purchased any time <u>after</u> initial core software purchase.	<b>500:</b> Adds support for additional 500 points to core software. <b>1250:</b> Adds support for additional 1250 points to core software. <b>2500:</b> Adds support for additional 2500 points to core software.

## EC-BOS-8 Hardware Accessory

**Example:** EC-BOS-8 *Wall Plug Module*

Accessory	Description
<b>EC-BOS-8 Wall Plug Module</b>	100-240VAC, 50/60 Hz. Wall Adapter – Connects to the 2.5mm barrel plug 24V input on the EC-BOS-8 and includes US, EU, UK, and AU style plugs.
<b>EC-BOS-8 WLAN Antenna Cable Extension</b>	Extension cable and bracket for EC-BOS-8 WLAN antenna.

## EC-BOS-8 Add-on Modules

**Example:** *IO-R-16*

Add-on Module	Description
<b>EC-NPB8-LON</b>	EC-BOS-8 - Add-on single port LON FTT10A module.
<b>EC-NPB8-2X-485</b>	EC-BOS-8 - Add-on dual port RS-485 module.
<b>EC-NPB8-232</b>	EC-BOS-8 - Add-on single port RS-232 module.
<b>IO-R-16</b>	16 Point IO Module. Powered by IO-R-34. Connected to the EC-BOS-8 remotely over RS485.
<b>IO-R-34</b>	34 Point IO Module. Powered by 24VAC/DC. Capable of powering (4) IO-R-16 modules. Connected to the EC-BOS-8 remotely over RS485.

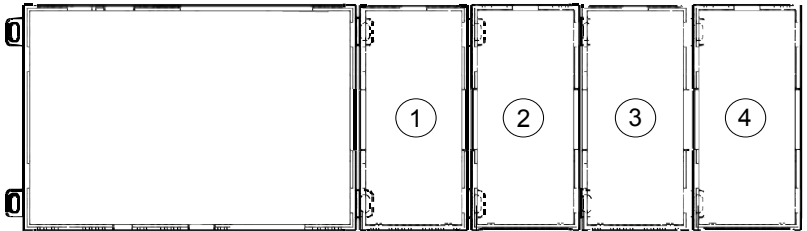
# Expansion Modules

Modules	Description	Maximum Expansion Modules Supported
EC-NPB8-LON	EC-BOS-8 - Add-on single port LON FTT10A module.	4
EC-NPB8-2X-485	EC-BOS-8 - Add-on dual port RS-485 module.	2
EC-NPB8-232	EC-BOS-8 - Add-on single port RS-232 module.	4
IO-R-16	16 Point IO Module	16 <sup>1</sup>
IO-R-34	34 Point IO Module	8 <sup>1</sup>

1. For detailed information about maximum number of modules supported and maximum combinations, refer to the EC-BOS-8 I/O Modules datasheet.

## Maximum Combinations *(see figure below):*

Expansion 1	Expansion 2	Expansion 3	Expansion 4
EC-NPB8-232 OR EC-NPB8-LON	EC-NPB8-232 OR EC-NPB8-LON	EC-NPB8-232 OR EC-NPB8-LON	EC-NPB8-232 OR EC-NPB8-LON
EC-NPB8-2X-485	EC-NPB8-232 OR EC-NPB8-LON	EC-NPB8-232 OR EC-NPB8-LON	EC-NPB8-232 OR EC-NPB8-LON
EC-NPB8-2X-485	EC-NPB8-2X-485	EC-NPB8-232 OR EC-NPB8-LON	



# Product Specifications

## Platform

Processor	TI AM3352 1000MHz ARM® Cortex™-A8
Memory	1GB DDR3 SDRAM
	- Removable micro-SD card with 4GB flash total storage/2GB user storage
	- Real-time clock
	- Batteryless
	- Secure boot

## Communications

Wi-Fi	Client or WAP
Wi-Fi Communication Protocol	IEEE802.11a/b/g/n
	IEEE802.11n HT20 @ 2.4GHz
	IEEE802.11n HT20/HT40 @ 5GHz
Configurable radio	Off, WAP, or Client
Client Authentication Method	WPAPSK/WPA2PSK supported
USB type A connector	Back-up and restore support
RS-485	2 isolated RS-485 with selectable bias and termination
Ethernet	2 10/100MB Ethernet ports
BACnet Listing	BTL, B-BC listed with version 4.4.93 or later

## Power Supply

Voltage	24VAC/DC power supply
Consumption	24VA (24VAC); 24W (24VDC)

## Operating Systems

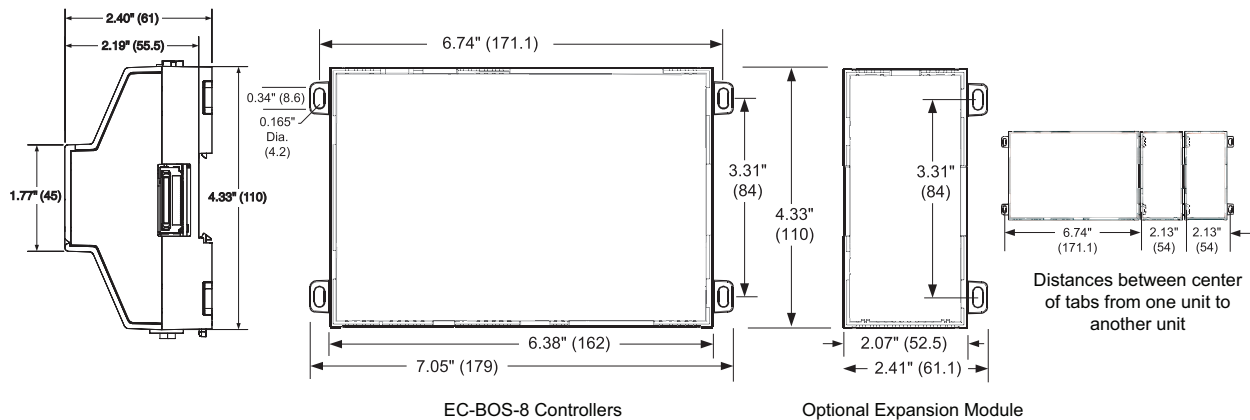
EC-Net 4	4.1 or later
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## Environmental

Operating Temperature	-20 to 60°C (-4 to 140 °F)
Storage Temperature	-40 to 85°C (-40 to 185 °F)
Relative Humidity	5% to 95% - Non condensing
Shipping and Vibration	ASTM D4169, Assurance Level II
MTTF	10 years+

## Standards and Regulations

UL	UL 916
	C-UL listed to Canadian Standards Associations (CSA)
	C22.2 No. 205-M1983 "Signal Equipment"
CE	EN 61326-1
FCC	Part 15 Subpart B, Class B, Part 15 Subpart C
R&TTE Compliance	1999/5/EC R&TTE Directive
Other compliances	CCC, SRRC, RSS, RoHS



Specifications subject to change without notice.

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