Building Control Systems



TO: Authorized System Distributors

Authorized Controls Integrators
Building Control Specialists
Building Controls Associates
Honeywell Sales Representatives

SUBJECT: Launch of New WEB-300E Controller and WEB-201 Phase out plans

BULLETIN: 13-0099

Announcing the New WEB-300E Controller

Honeywell is pleased to announce the availability of the WEB-300E controller, which will replace existing WEB-201 controllers over the next six months.

The WEB-300E network controller is an upgrade and replacement to the existing WEB-201controller. Some of the enhancements include a built-in Static Random Access Memory (SRAM) module that ensures that the station's data is saved upon loss of power, ability to use without a battery due to the Data Recovery Service (DRS), and the ability to operate at a higher ambient temperature. This controller is supported with WEBs-AX™ 3.7.u1or later software.

The DRS is a feature that was introduced in the WEBs-AX 3.6 software release. DRS works by monitoring station changes and frequently saving them to the capacitor charged SRAM module to update any changes since the last station save.



Value Propositions

For Contractors/Integrators:

- Built in SRAM module ensures station data is saved upon loss of power, thus reducing call backs from uneasy end users.
- Lowers maintenance costs, as there is no need to have a battery when using DRS.

- Optional battery is easier to install & saves time over adding a Universal Power Supply based solution.
- Ability to operate at higher ambient temperature (60°C or 140°F).

For End Users:

- Batteries are no longer required to be maintained when using DRS.
- With optional battery, stations can run for an extra 10 minutes upon losing power, thus not noticing transient power loss.
- With increased memory and processor speed, WEB-300E offers better performance.

WEB-300E Controller Features

The WEB-300E controller is a next generation controller for WEB-201 controller.

- New NPM3 Processor Module
 - o 405EX PowerPC @ 400MHz
 - o 256MB RAM
 - o 128MB Flash
 - Battery-less operation
- 60°C (140°F) ambient operating temperature
- Optional battery offers increased runtime over WEB-201
- Supports Oracle Hotspot VM
- Supports new IT Security Crypto Module
 - o FCC Part 15 Class B compliant
- Requires NiagaraAX™ 3.7U1 or later

Following is a comparison of WEB-300E with the older WEB-201controller:

Description	WEB-201	WEB-300E
Processor Speed	250MHz	400 MHz
Memory Capacity – RAM	64MB	256MB
Flash Memory	64MB	128MB
Battery Less Operation	N/A	Yes
Operating Temperature Range	32F to 122F	32F to 140F
Physical Size	Same	Same
Software Supported By	No higher than WEBs- AX 3.6.u4	Higher than WEBs-AX 3.7u1

Product Availability

You can now place orders for the new WEB-300E controller. The controller is supported by the WEBs-AX 3.7U1software, which was released on July 18, 20123 (see <u>Bulletin #13-0065</u> for more details on WEBs-AX 3.7u1).

Product Obsolescence

• With the addition of this new WEB-300E controller, the WEB-201 controller will begin its end of life phase. The last date that you can place an order for the WEB-201 is 03/01/2015.

Obsolete Products	Replacement Product	
WEB-201/U	WEB-300E	
WEB-201-O/U	WEB-300E-O	
W-2XX-AX-DEMO/U	WEB-300E-AX-DEMO	

• The WEB-600 controller is now in end of life phase. The replacement controller is the WEB-600E which was released in January 2013. The last date to place an order for the WEB-600 is 01/07/2014.

Pricing of New Products

Part Number	Description	Trade Base Price (US)
WEB-300E	Includes two Ethernet ports, one RS-232 port, and one RS-485 port. Web User Interface and Niagara Connectivity included. oBIX Client/Server driver included.	
WEB-300E-O	WEB-300E with Open License, includes two Ethernet ports, one RS-232 port, and one RS-485 port. Web User Interface and Niagara Connectivity included. oBIX Client/Server driver included.	
WEB-300E-AX-DEMO	WEB-3XX-AX-DEMO Base Unit including two Ethernet ports, one RS-232 port, and one RS-485 port. Web User Interface and Niagara Connectivity included. oBIX Client/Server driver included. Includes NPB-WPM-US/U, NPB-LON/U, NPB-2X-RS485/U, IO-16-REM-H/U, NPB-BATTERY/U, NPB-RS232/U. Requires AX release 3.7.106 or higher.	

Marketing Materials and Technical Literature

A power point presentation of the WEB-300E is available on buildingcontrols.honeywell.com.

The following documents have been added to customer.honeywell.com:

Fori Numi		Description	Literature Type	Location
<u>31-00</u>	010	WEB 300E Network Controller	Installation Instructions	B2B
<u>31-00</u>	009	WEB-300E Network Controller	Product Datasheet	B2B

Updated Pricing on the Supervisor Upgrade

The SUP-U-AX/U is missing from the latest price book. The US Base Price on this product has increased from last year:

Part Number	Description	Old Trade Base Price (US)	New Trade Base Price (US)
SUP-U-AX/U	New release software upgrade for WEBs-AX Supervisor. Price includes all applications and drivers licensed for the Supervisor. Upgrades the Supervisor to the current release.		

Frequently Asked Questions

What's new about the WEB-300E network controller?

The WEB-300E control engine includes an all new NPM (Niagara Processing Module) that offers significant improvements over the WEB-201. The NPM3 boasts a faster 400MHz PowerPC 405EX processor with 256MB RAM and 128MB Flash. Other features include:

Hotspot VM

Running Oracle's Hotspot VM will enable the WEB-300E to be Niagara 4.X ready. It will also allow use of newer WEBs-AX 3.7 features such as the updated Crypto module for enhanced IT security.

Battery-less Operation

Like the WEB-600E, the WEB-300E also has an SRAM module included in the NPM. This allows the controller to operate without a battery. The battery can be added as an accessory to add run time.

Higher Ambient Operating Temperature

Like the WEB-600E, the WEB-300E will be able to run at ambient temperatures up to 140°F (60°C) if installed without the battery. With the NPB-BATT option installed the ambient temperature is 122°F (50°C).

WEBs-AX 3.7U1

The NPM3 platform support requires WEBs-AX 3.7U1 or later.

FCC Part 15 Class B

The WEB-300E meets a higher standard for noise emissions compared to the WEB-201.

How does the WEB-300E performance compare to a WEB-201 or WEB-600E?

The WEB-300E offers a performance improvement over the WEB-201 model it replaces, which can increase capacity up to 20 percent. Unlike the WEB-600E, the WEB-300E does not have a math co-processor. The WEB-600E is still recommended for medium and large commercial buildings, where integration with more than a small number of devices are required.

Overall time to begin running a station on a WEB-300E is less than a WEB-201. However, some users may notice a slight delay vs. a WEB-201 when making a platform connection upon power-up. This is normal since the WEB-300E now runs a Java based niagaraD.

What accessories are available with the WEB-300E?

The WEB-300E is compatible with the following add on accessories:

- NPM-256MB/U Memory License Upgrade for WEB-300E (96MB JAVA Heap)
- NPB-BATTERY/U Optional Battery Module
- IO-16-H/U 16 point IO module
- IO-34-H/U 34 point IO module with integrated 24VAC power supply
- IO-16-REM-H/U Remote RS485 based IO module
- NPB-PWR-H/U 24VAC Power supply
- NPB-PWR-UN-H/U Universal 90VAC to 240VAC Power supply
- NPB-2X-RS485/U Dual RS 485 option card
- NPB-LON/U FTT10 LON option card
- NPB-RS232-H/U RS 232 option card
- NPB-GPRS-H/U GPRS wireless option card
- NPB-ZWAVE/U Z wave option card slot for USA

What applications is the WEB-300E best suited for?

Like the WEB-201, the WEB-300E is best suited for small building applications. While serving a handful of BACnet, LON, Modbus, or other devices the WEB-300E will offer a faster web experience for users. For installations that require more stringent IT security, the newer crypto module in Niagara can be used on the WEB-300E to establish SSL connections, perform certificate management, and password management.

How much JAVA Heap memory does the WEB-300E have?

The WEB-300E comes with 24MB of JAVA Heap memory. If more Heap is required the NPM-256MB/u feature may be added to a license to allow up to 96MB.

Does my WEB-300E require a battery?

The WEB-300E does not require a battery or power monitoring services to save critical station data. In the past, the battery was needed to allow the station enough time to safely shutdown. To ensure station data was not lost, a WEB-201 without NPB-SRAM always had to perform a successful station save into flash memory. The WEB-300E uses the Data Recovery Service and a built in SRAM module to ensure station data is saved if power was suddenly removed or disturbed. An optional battery is available as an accessory to provide extended runtime and prevent station resets if desired.

Can the WEB-300E use a battery?

Yes, if the battery is installed, power monitoring will work as with previous controllers and proceed with saving the station and shutdown in the event primary power is lost. If installed with a battery the WEB-300E will now be capable of running the station for up to 10 minutes if power is lost. Upon station restart, data will be loaded from flash, and in the event unsaved data is detected it will be loaded from the built in SRAM module.

How do Data Recovery Services Work?

Starting in WEBs-AX 3.6M (and 3.7U1 for the WEB-300E), Data Recovery Services can be used simultaneously with Power Monitoring services. Data Recovery Services work by monitoring station changes and frequently saving them to the SRAM module. If the controller were to reset, upon restart it would reload the station. If a normal station save had not been completed successfully, Niagara would use the data stored in the SRAM module to update any changes since the last station save. Use of Data Recovery removes the requirement to perform a station save & shutdown before losing power.

What do I need to do to use Data Recovery Services?

By default, Data Recovery Services are included in every new WEB-300E station that is created. No action is required to start using Data Recovery, however during installation the service can be adjusted to control what

station changes prompt using the SRAM module and how frequently. Settings can be optimized to meet the site's requirements.

How long can Data Recovery Services store unsaved station data?

The SRAM module is powered by a super capacitor inside the WEB-300E. There is sufficient power to maintain unsaved station data for up to two weeks in the event of a major power outage. After two weeks, if energy in the super capacitor is depleted, station changes that had occurred since the last station save will be lost.

How long will the controller run without power? Will the WEB-300E reset frequently?

The battery less WEB-300E was designed to run through brief power outages and disturbances. Typically, without a battery the controller will run for several AC line cycles before powering down. Under worst-case circumstances the WEB-300E will run at least one AC line cycle (16-20ms), before shutting down. This corresponds with standard UPS transfer times, as most offer secure backup power in less than one AC line cycle. Data Recovery Services ensure critical station data is not lost, however frequent power outages may cause the JACE to restart after power is restored. If station restarts are undesirable the optional battery accessory (NPB-BATTERY/U) is recommended to provide UPS comparable runtime.

How long will the optional battery run?

The optional battery kit will provide up to 10 minutes of runtime. Similar to the battery in the WEB-201, the life expectancy of the battery is one to three years based on how frequently it is used and the operating environment.

What happens if my battery is bad, will my station work properly?

If the optional battery kit is installed, and goes bad, station data will not be lost. Data Recovery Services ensure that unsaved data is not lost. So, regardless if no battery, bad battery, or a good battery is installed, upon station restart unsaved changes will be updated from the SRAM module.

If I decide to add a battery module to my controller after installation, does it need to be configured?

No, the controller is configured by default to use battery power if available. If a battery is added after installation the controller will automatically provide additional runtime during power outages.

What ambient temperatures can the WEB-300E operate in?

The WEB-300E is UL listed to operate in temperatures from 32°F to 140°F (0 to 60°C). If the optional battery is installed, the WEB-300E is UL listed for 32°F to 122°F (0 to 50°C) operation. For temperatures above 122°F (50°C) it is recommended the NPB-PWR-H/U or IO-34-H/U module with an integrated power supply be used to power the WEB-300E controller.

Is the WEB-300E the same physical size as a WEB-201/WEB-600E?

Yes, the WEB-300E shares the base board and cover with a WEB-201/WEB-600E

How long will the support be available for the WEB-201controller?

With the introduction of the WEB-300E controller, the phase out of WEB-201 has begun. The WEB-201 controller will be available for sale until 01/03/2015, and will be supported as per the terms and conditions specified in the warranty section of the product. However, we strongly recommend starting using WEB-300E for all the advantages and benefits outlined above in this document.

More Information

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<u>literature.honeywell.com</u>

• Technical Assistance Center (WEBsSquad)

Toll free at 888-235-6048 Email at <u>WEBsSquad@honeywell.com</u> 8 a.m. – 5 p.m. Central Time, M-F

• Sales and Product Information

Contact your local Honeywell sales representative