

HON-9000 CONTROLLER

The Honeywell HON-9000 controller is a compact, embedded IoT (Internet of Things) controller and server platform for connecting multiple and diverse devices and sub-systems. With internet connectivity and web-serving capability, the HON-9000 controller provides integrated control, supervision, data logging, alarming, scheduling and network management. It streams data and rich graphical displays to a standard web browser via an Ethernet or wireless LAN, or remotely over the internet.

The licensing model for the HON-9000 controller is simplified and features standard drivers, along with optional IO and field bus expansion modules for ultimate flexibility and expandability. The HON-9000 controller operates with Optimizer N4.13u2, the latest version of the Niagara Framework®, for optimum performance. In larger facilities, multi-building applications and large-scale control system integrations, Optimizer N4.13u2 and higher version of Supervisors can be used with HON-9000 controllers to aggregate information, including alarms, and historical and real-time data, to create a single, unified application.



Honeywell HON-9000 Controller



EFFICIENT GLOBAL DESIGN

- The modular design of the HON-9000 controller makes it easy to install, integrate and deploy.
- Tool-less installation with expansion capability reduces installation complexity and improves flexibility.
- System integrators can focus on engineering solutions, not assembling components. And their lives will be simplified with a global power supply and improved access to standard enclosures.



INCREASED PERFORMANCE

- With a Quad Core processor, double storage, and RAM, the HON-9000 controller offers increased performance and capacity with faster bootup and station load time.
- The HON-9000 controller is fully compatible with existing expansion modules and the same footprint as past modules allow for seamless replacement for future updates.
- The HON-9000 controller can also be ordered without the wireless interface if needed.
- Data analysis at the onsite HON controller level.
- Real-time on-premise analytic control.

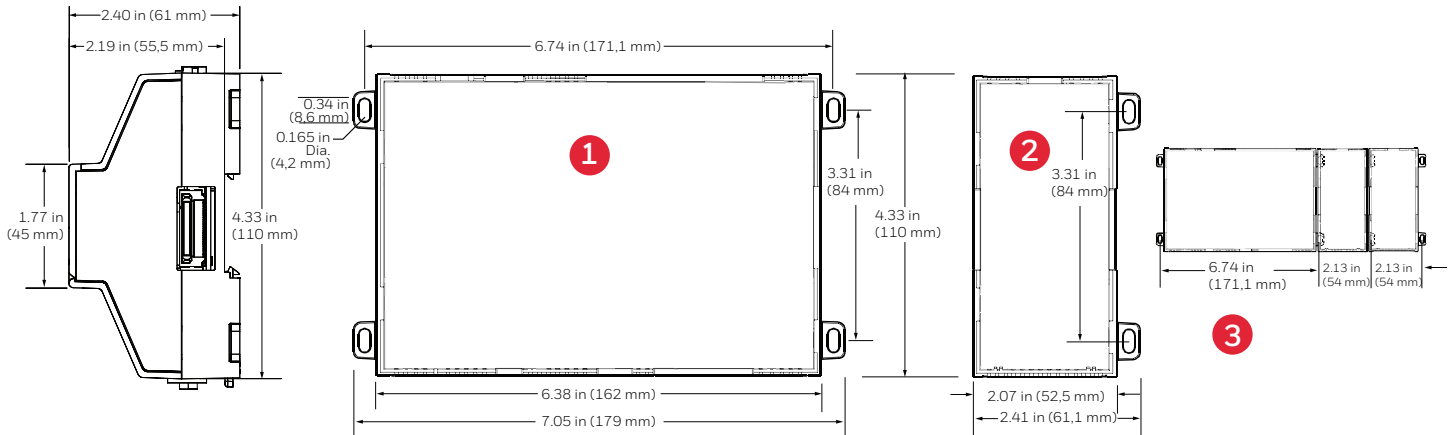


OPTIMIZED FOR NIAGARA 4

- The HON-9000 controller leverages the exciting features of Optimizer Supervisor N4.13u2 and higher.
- It adds to the enhanced user experience, maximizing Niagara 4's key advantages: pure Web interface based on HTML5 views, responsive UI, charting and data visualization, a common design language, better reporting, robust security, and improved device management.

HON-9000 MOUNTING AND DIMENSIONS

- 1 Allow at least 1.5 in (35 mm) clearance around all sides of HON-9000 controller and minimum 3 in (76 mm) at bottom for optional WiFi antenna.
- 2 Expansion module. Up to four (4) may be used.
See “Expansion Module and IO Configurations”.
- 3 Distances between center of tabs from one unit to another unit.



All dimensions are in inches (mm).

Compatible with (DIN43880) enclosures.

Suitable for mounting to a panel or to an EN50022 standard 1.38 in (35 mm) DIN rail.

Vizio stencils available upon request.

STANDARDS AND APPROVALS

UL 916

CE EN 61326-1

RCM

UL/ULC 60730-1

FCC Part 15 Subpart B, Class B

FCC Part 15 Subpart C

1999/5/EC R&TTE Directive

CCC

SRRC

RSS

RoHS

C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 “Signal Equipment”

ENVIRONMENTAL SPECIFICATIONS

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

HARDWARE SPECIFICATIONS

NXP iMX8M+ Quad Core CPU

2 GB LPDDR4 RAM

Removable 8 GB microSD card

WiFi (Client or WAP)

- WiFi 5 (802.11ac)
- 1x1 802.11 a/b/g/n/ac
- Configurable radio (Off, WAP, or Client)
- WPAPSK/WPA2PSK supported
- Only available for wireless model.

USB type C connector

- Debug port

Two isolated RS-485 with selectable bias and termination

Two 10/100/1000 MB Ethernet ports

Secure boot

*Supply requirements: 24 VAC rated at 24 VA minimum,
or 24 VDC rated at 1 Amp (24 W) minimum

Runs Optimizer Supervisor N4.13u2 or later

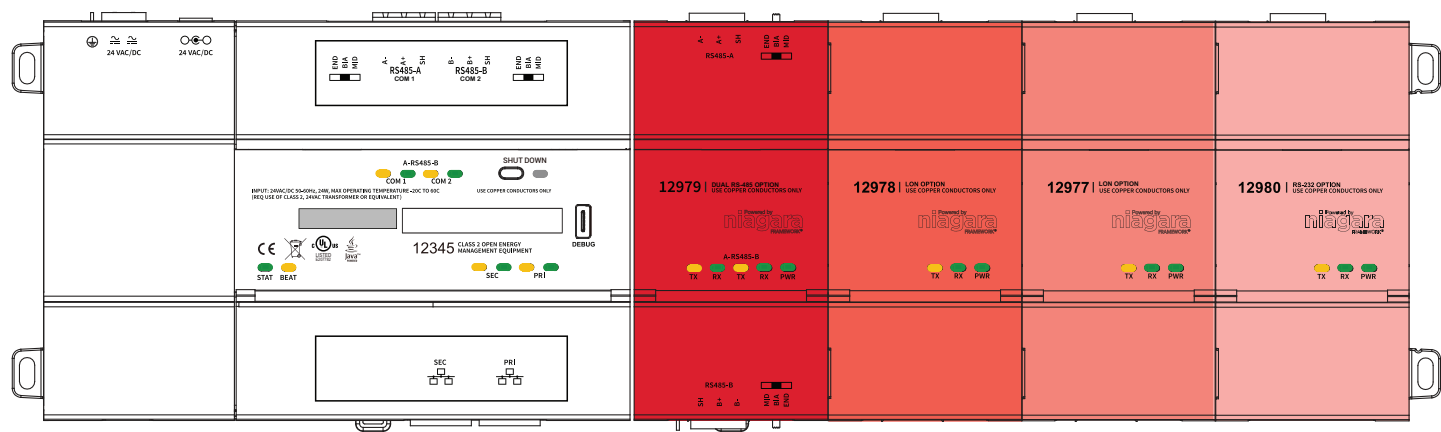
Real-time clock

Battery less

*WEBs Enterprise Security requires four hours of standby power.

EXPANSION MODULE AND IO CONFIGURATIONS

MAXIMUM EXPANSION (MODULES SUPPORTED)	MAXIMUM IO (MODULES SUPPORTED)	MAXIMUM WEBS ENTERPRISE SECURITY (MODULES SUPPORTED)
- NPB-8000-LON (4) - NPB-8000-232 (4) - NPB-2000-2X (2)	- IO-R-16 (16) - IO-R-34 (8)	- SEC-H-R2R/U* - SEC-H-RIO/U*



EXPANSION 1	EXPANSION 2	EXPANSION 3	EXPANSION 4
232 or LON	232 or LON	232 or LON	232 or LON
485	232 or LON	232 or LON	232 or LON
485	485	232 or LON	
485	485		
485	485		
485	485		

* Devices subject to local availability. Contact your local sales representative for information on available devices in your region.



ORDERING INFORMATION

HON-9000 CONTROLLER PART NUMBERS	
PART NUMBER	DESCRIPTION
HON-9000	Individual HON-9000 Controller, microSD card, branding clip, two 10/100/1000 Mb Ethernet ports, and two RS-485 serial ports. Requires NC-9XXX core software and SMA-9XXX software maintenance.
HON-9000-CSE-003	Case (15) HON-9000 - includes branding clip - microSD card not included. Price is for each unit. MOQ - 15 PO must be in quantities of 15. WLAN Disabled (No WLAN) Country Code
HON-9000-DEMO	Includes HON-9000 controller, with Demo 500 device license microSD card, branding clip, two 10/100/1000 MB Ethernet ports, two RS-485 serial port and all available Optimizer drivers. License will renew annually with the receipt of the annual support fee. Requires Optimizer N4.13u2 or higher. Hardware Accessories are not included. See Hardware Options for Wall Power supply and expansion modules.
HON-9000-BRAND	Branding clips for HON-9000. For purchase together with HON-9000-CSE. Price is for each unit and MOQ is 15 pieces. PO must be in quantities of 15.
HON-9000-HW	Replacement HON-9000 Hardware only. Does not include microSD card or core software license. Does include branding clip when requested.
HON-9000-SD-HW	Replacement 8 GB HON-9000 microSD card only. Does not include software core or license.
HON-9000-USD-CSE	Case (15) HON-9000 microSD cards. Price is for each unit. MOQ – 15, PO must be in quantities of 15.
NC-9000-EC	HON-9000 - Equipment Controller - (0) Device & (0) Points. Includes standard open drivers (Capacity must be added). Requires Optimizer Supervisor N4.13u2 or higher.
NC-9005	HON-9000 - (5) Device Core Software Only & 250 Points. Includes standard open drivers. Supports up to 5 devices or 250 points. Requires Optimizer Supervisor N4.13u2 or higher.
NC-9010	HON-9000 - 10 Device Core Software Only & 500 Points. Includes standard open drivers. Supports up to 10 devices or 500 points. Requires Optimizer Supervisor N4.13u2 or higher.
NC-9025	HON-9000 - 25 Device Core Software Only & 1250 Points. Includes standard open drivers. Supports up to 25 devices or 1250 points. Requires Optimizer Supervisor N4.13u2 or higher.
NC-9100	HON-9000 - 200 Device Core Software Only & 5000 Points. Includes standard open drivers. Supports up to 200 devices or 10000 points. Requires Optimizer Supervisor N4.13u2 or higher.
NC-9200	HON-9000 - 200 Device Core Software Only & 10000 Points. Includes standard open drivers. Supports up to 200 devices or 10000 points. Requires Optimizer Supervisor N4.13u2 or higher.
NC-9XXX-DEMO	HON-9000 Demo with 500 Device Core. Includes all available Optimizer Drivers. Requires Optimizer N4.13u2 or higher. Available with Niagara Analytics (non-production only). License will renew annually with the receipt of the annual support fee.
IO-R-16	Optional 16-point IO RS-485 module designed for use with the WEB-8000 & HON-9000 - Includes (8) Universal Inputs, (4) Form A Relay Outputs, and (4) 0-10 VDC Analog Outputs
IO-R-34	Optional 34-point IO RS-485 module designed for use with the WEB-8000 & HON-9000 - Includes 16 Universal Inputs, (10) Form A Relay Outputs, and (8) 0-10 VDC Analog Outputs.
NPB-8000-2X-485	WEB-8000 & HON-9000 controllers – add on dual port RS-485 module.
NPB-8000-232	WEB-8000 & HON-9000 controllers – add on single port RS-232 module.
NPB-8000-LON	WEB-8000 & HON-9000 controllers – add on single port LON FTT10A module.
SMA-9005-1YR	HON-9005 - 1 year maintenance
SMA-9005-1YR-INIT	HON-9005 - Initial 18-month maintenance must be purchased in conjunction with initial Core software. Optional 3- or 5-year maintenance may be substituted.
SMA-9005-3YR	HON-9005 - 3-year maintenance
SMA-9005-5YR	HON-9005 - 5-year maintenance
SMA-9010-1YR	HON-9010 - 1 year maintenance
SMA-9010-1YR-INIT	HON-9025 - Initial 18-month maintenance must be purchased in conjunction with initial Core software. Optional 3- or 5-year maintenance may be substituted.

HON-9000 CONTROLLER PART NUMBERS

SMA-9010-3YR	HON-9010 - 3-year maintenance
SMA-9010-5YR	HON-9010 - 5-year maintenance
SMA-9025-1YR	HON-9025 - 1 year maintenance
SMA-9025-1YR-INIT	HON-9025 - Initial 18-month maintenance must be purchased in conjunction with initial Core software. Optional 3- or 5-year maintenance may be substituted.
SMA-9025-3YR	HON-9025 - 3-year maintenance
SMA-9025-5YR	HON-9025 - 5-year maintenance
SMA-9100-1YR	HON-9100 - 1 year maintenance
SMA-9100-1YR-INIT	HON-9100 - Initial 18-month maintenance must be purchased in conjunction with initial Core software. Optional 3- or 5-year maintenance may be substituted.
SMA-9100-3YR	HON-9100 - 3-year maintenance
SMA-9100-5YR	HON-9100 - 5-year maintenance
SMA-9200-1YR	HON-9200 - 1-year maintenance
SMA-9200-1YR-INIT	HON-9200 - Initial 18-month maintenance must be purchased in conjunction with initial Core software. Optional 3- or 5-year maintenance may be substituted.
SMA-9200-3YR	HON-9200 - 3-year maintenance
SMA-9200-5YR	HON-9200 - 5-year maintenance
WPM-8000	WEB-8000 / HON-9000 100-240 VAC, 50/60 Hz. Wall Adapter – Connects to the 0.1 inch (2.5 mm) barrel plug 24 V input on the WEB-8000 and includes US, EU, UK, and AU style plugs. Excluded from JACE agency listings.

ORDERING INFORMATION: NIAGARA ANALYTICS

Data analysis at the onsite HON-9000 controller level Real-time on-premises analytic control Niagara Analytics is a data analytics extension to the Niagara Framework® available on HON-9000 controllers. 25 Niagara Analytic points are included with every HON-9000 license. Niagara Analytics licenses are conveniently and cost-effectively based on the number of analytical points and do not expire. Your Software Maintenance Agreement covers all Niagara Analytics enhancements, adding to the value of the SMA.

NIAGARA ANALYTICS ORDERING PART NUMBER

PARAMETER	DESCRIPTION
NA-EC-N4-100	Niagara Analytics Framework (on Optimizer Supervisor N4.13u2 or higher) license for 100 analytic points for an Embedded HON-9000 Controller
NA-EC-N4-250	Niagara Analytics Framework (on Optimizer Supervisor N4.13u2 or higher) license for 250 analytic points for an Embedded HON-9000 Controller
NA-EC-N4-500	Niagara Analytics Framework (on Optimizer Supervisor N4.13u2 or higher) license for 500 analytic points for an Embedded HON-9000 Controller
NA-EC-N4-1000	Niagara Analytics Framework (on Optimizer Supervisor N4.13u2 or higher) license for 1000 analytic points for an Embedded HON-9000 Controller

ORDERING INFORMATION: SOFTWARE & SOFTWARE MAINTENANCE

Every HON-9000 is available with a Honeywell Optimizer Niagara 4.13u2 or higher software license and Optimizer standard drivers. Purchase of a software maintenance agreement (SMA) is required with initial HON-9000 licensing. The initial SMA is for 18 months, with extended agreements of 3 years and 5 years available for discounted rates. Note: If a Software Maintenance Agreement is not in effect for any period, the price of maintenance for the next period for which it is purchased will be priced at a cost equal to the maintenance fee for the period(s) for which maintenance was not purchased, up to a maximum of 5 years, plus the maintenance fee for the next year.

HON-9000 ORDERING INFORMATION: WEBS ENTERPRISE SECURITY

WEBS Enterprise Security is an access control product offering that is powered by the Niagara Framework® for integrated control. The WEBS Enterprise Security application runs within the Niagara Framework on the HON-9000. WEBS Enterprise Security licensing is consistent with all Niagara 4 licensing. Use the same HON-9000 and Supervisor parts that are used for building automation applications and add security licensing.

WEBS ENTERPRISE SECURITY ON THE HON-9000

PART NUMBER	DESCRIPTION
SEC-J9-32	WEBS Enterprise Security license for HON-9000 controller on N4 platform. Includes licensing for 32 readers (not included in capacity). Does not include the HON-9000 controller

HON-9000 ACCESSORIES FOR WEBS ENTERPRISE SECURITY

PART NUMBER	DESCRIPTION
SEC-H-R2R/U	Security module for (2) readers or access doors and (2) digital inputs.
SEC-H-RIO/U	Security module with (8) supervised inputs, (8) relay outputs and (2) digital inputs
SEC-ENC-H-2NP/U	Large enclosure with keyed lock, door status switch, and (2) din rails for mounting WEB-8000 or HON-9000 controller and up to (4) remote reader modules or (2) remote IO modules. Several other combinations of devices may be mounted in this panel. Dimensions: 17"W x 22"H x 4"D.

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