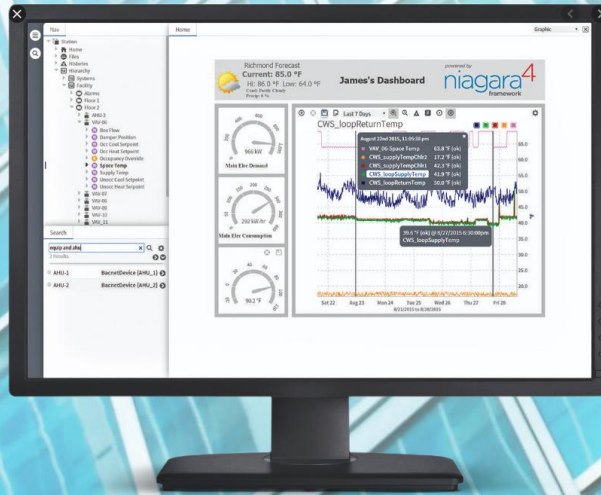# EIO-S-N4

NIAGARA 4 SUPERVISOR

DESCRIPTION

The EasyIO N4 Supervisor is an IoT (Internet of Things) software platform used in server-class applications. It makes managing all buildings at an enterprise level possible, giving facilities managers the ability to quickly respond to problems and insights to optimize their system.

The EasyIO N4 Supervisor allows multiple Niagara-based JACE® controllers, along with other IP-based controllers, to be networked together. It serves real-time graphical information to standard web-browser clients and provides server-level functions. These functions include centralized data logging/ trending, archiving to external databases, alarming, dash boarding, system navigation, master scheduling, database management, and integration with other enterprise software applications through an XML interface (oBIX standard). Also, it provides a comprehensive graphical engineering toolset for application development.

The FW (WiFi) series supports IT network and security standards and WiFi b/g/n. This series can be used as part of an existing network or as an isolated BMS WiFi network. The dual Ethernet port capability allows for daisy chain capability within the recommended IT standards.

The FW series supports BACnet IP client/server, BACnet MSTP client, and Modbus RTU slave as well as Sox, TCOM, P2P and MQTT. The FW series also features HTML5-ready dashboards and can be programmed live via CPT.

The FW-08 includes 4 UI and 4 AO. For floating control, add the optional FR-02 module. Input point capacity can be expanded with the EasyIO-FD-20i. Licenses and annual maintenance are included in the one-time cost of the controller.

FEATURES

- Centralized system management
- Quickly navigate to individual buildings using tags to diagnose problems
- Compare data between buildings
- Export system data to external databases
- Integrate BAS to other enterprise applications
- Integrate to other applications, such as work order management, analytics, etc.
- Single tool used to program JACE, Niagara Edge controllers and Supervisor
- Remotely back up JACE and Edge applications to Supervisor
- Batch provisioning of JACE and Edge firmware upgrades, security credentials, applications and commissioning options from Supervisor

- Robust built-in analytic capabilities supported by standard Niagara components and visualizations
- Includes Niagara Analytics, adding data source, functional and mathematical programming blocks to enable sophisticated analytic algorithms
- Compatibility with Niagara Enterprise Security access control and security application. Allows integration of BAS and access control to save energy and optimize operations
- Eligible for accreditation under the Federal Risk Management Framework (RMF)
- FIPS 140-2 Level 1 conformance available

TECHNICAL DATA

PLATFORM REQUIREMENTS

Niagara 4 Supervisors may run acceptably on lower-rated platforms, or may even require more powerful platforms, depending on the application, number of data points integrated, data poll rate, number of concurrent users, performance expectations, etc.

PROCESSOR :	Intel® Xeon® CPU E5-2640 x64 (or better), compatible with dual- and quad-core processors
OPERATING SYSTEM :	Windows 7 Professional/Enterprise/Ultimate (64 bit), Windows 8.1 Professional/Enterprise/ Ultimate (64 bit), Windows 10 (64 bit), Windows Server 2012 R2 (SP2) Standard/Enterprise, Windows Server 2016, Red Hat Enterprise Linux 7.5
MEMORY :	6 GB minimum, 8 GB or more recommended for larger systems
HARD DRIVE :	4 GB minimum, more recommended depending on archiving requirements
DISPLAY :	Video card and monitor capable of displaying 1024 x 768 pixel resolution or greater
NETWORK SUPPORT :	Ethernet adapter (10/100 Mb with RJ-45 connector)
CONNECTIVITY :	Full-time high-speed ISP connection recommended for remote site access (i.e., T1, ADSL, cable modem) and IPv6 compliant

SPECIFICATIONS

	HTML5 and Java-enabled user interface (UI); JavaScript data interface library included (BajaScript)
	Supports an unlimited number of users over the internet/intranet with a standard web browser (depending on the host PC resources)
	Optional enterprise-level data archival using SQL, MySQL or Oracle databases, and HTTP/HTML/ XML, CSV or text formats
	"Audit Trail" of database changes, database storage and backup, global time functions, calendar, central scheduling, control and energy management routines
	Sophisticated alarm processing and routing, including email alarm acknowledging
	Access to alarms, logs, graphics, schedules and configuration data with a standard web browser
	Niagara follows industry best practices for cyber security, with support for features such as strong, hashed passwords, TLS for secure communications and certificate management tools for authentication. A built-in Security Dashboard provides a comprehensive and actionable view of the security posture of your Niagara deployment
	HTML-based help system that includes comprehensive online system documentation
	Supports multiple Niagara-based stations connected to a local Ethernet network or the internet
	Provides online/offline use of the Niagara Framework® Workbench graphical configuration tool and a comprehensive Java Object Library
	Optional direct Ethernet-based driver support for most Open IP field bus protocols (see supported drivers document)

ORDERING REFERENCES	
SUP-1	1 Niagara network connection (18mo SMA req)
SUP-1-SMA-INIT	18mo initial SMA required (3YR or 5YR can be substituted)
SUP-2	2 Niagara network connections (18mo SMA req)
SUP-2-SMA-INIT	18mo initial SMA required (3YR or 5YR can be substituted)
SUP-3	3 Niagara network connections (18mo SMA req)
SUP-3-SMA-INIT	18mo initial SMA required (3YR or 5YR can be substituted)
SUP-10	10 Niagara network connections (18mo SMA req)
SUP-10-SMA-INIT	18mo initial SMA required (3YR or 5YR can be substituted)
SUP-100	100 Niagara network connections (18mo SMA req)
SUP-100-SMA-INIT	18mo initial SMA required (3YR or 5YR can be substituted)
SUP-UNL	Unlimited Niagara network connections (18mo SMA req)
SUP-UNL-SMA-INIT	18mo initial SMA required (3YR or 5YR can be substituted)