## JENE-PC3000<sup>e</sup> & JENE-PC6000<sup>e</sup>



EMBEDDED CONTROLLERS
PRODUCT DATA SHEET







The JENE-PC3000° and JENE-PC6000° are compact, embedded devices combining integrated control, supervision, data logging, alarming, scheduling, and network management functions with Internet connectivity and web serving capabilities. As members of the JENEsys® platform, these embedded devices make it possible to control and manage equipment and external devices over the Internet and present real time information to users in web-based graphical views.

#### **Applications**

JENE-PC3000° and JENE-PC6000° controllers are ideal for any size facility providing distributed control and monitoring of equipment and integrated devices. Optional input/output modules can be plugged in for applications where local control is required. They support a wide range of field buses for connection to remote I/O and stand-alone controllers. In small facility applications, the JENE-PC3000° and JENE-PC6000° is all you need for a complete system.

Both the JENE-PC3000° and JENE-PC6000° serve data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely utilizing the Internet or a GPRS modem. In larger facilities or for National Accounts, multi-building applications and large-scale control system integrations, JENEsys® AX Supervisor software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of JENEs into a single, unified application. A JENEsys® AX Supervisor 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 and dial-up or GPRS modems.

Equipment control and integration applications are generated using JENEsys® ProBuilder, a PC-based graphic engineering tool which simplifies the engineering process and assists in the start-up and trouble shooting of the application. In addition to these control applications, the JENE-PC3000° and JENE-PC6000° also perform a wide range of energy management functions including lead/lag, optimum start/stop, night purge, morning warm-up and cool-down and maximum load demand.

#### **Features**

- Embedded PowerPC Platforms
- Support open and legacy protocols
- QNX Real-time Operating System
- Web User Interface serves rich and graphical browser presentations
- Run Stand-alone control, energy management, and integration applications
- Supports two optional communication cards
- Optional 16 and 34 point I/O modules
- Data Recovery Services prevents data loss during power interruptions
- Optional battery is available for extended runtime.





# JENE-PC3000° & JENE-PC6000°

## EMBEDDED CONTROLLERS

# **Specifications**





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JENE-PC6000<sup>E</sup>

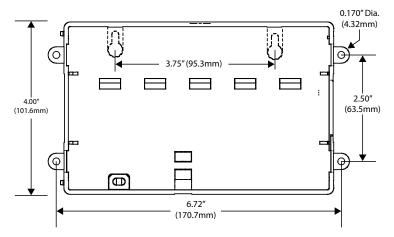
PLATFORM		
Operating System	QNX RTOS (Real-Time Operating System)	QNX RTOS (Real-Time Operating System)
Processor	PowerPC 405EX 400 MHz	PowerPC 440EP 524MHz
Memory	256 SDRAM & 128 MB Serial Flash	128 SDRAM & 128 MB Serial Flash. Optional 256 MB DDR RAM
SRAM Data Recovery Service	Yes	Yes
Real-Time Clock	Yes	Yes
Oracle Hotspot Java 5 VM	Yes	Yes
Niagara AX Version	v3.7.106 or later	v3.6 or later
COMMUNICATION PORTS		
Ethernet Port	Two 10/100 Mbps Ethernet Ports (RJ-45 connectors)	Two 10/100 Mbps Ethernet Ports (RJ-45 connectors)
RS-232 Port	One 9 pin D-Shell connector on base board	One 9 pin D-Shell connector on base board
RS-485 Port	One non-isolated, 3-screw connector on base board	One non-isolated, 3-screw connector on base board
32 Pin Option Card Slots	Two on base board	Two on base board
CHASSIS		
Construction	Base: Plastic, DIN rail or screw mount options. Cover: Plastic	Base: Plastic, DIN rail or screw mount options. Cover: Plastic
Cooling	Internal air convection	Internal air convection
Dimensions	6.38" (162mm) W x 4.0" (101.6mm) H x 2.44" (62mm) D	6.38" (162mm) W x 4.0" (101.6mm) H x 2.44" (62mm) D
ENVIRONMENT		
Operating Temperature Range	0 to 60°C (32 to 140°F)	0 to 60°C (32 to 140°F)
Operating Temperature Range w/ optional battery kit	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)
Storage Temperature	0 to 70°C (32 to 158°F)	0 to 70°C (32 to 158°F)
Relative Humidity Range	5 to 95 %RH, non-condensing	5 to 95 %RH, non-condensing
AGENCY LISTINGS		
	LIL 016 FOC part 15 Class B. Dal IC Compliant OF	UL 916, FCC part 15 Class A, RoHS Compliant, CE,
Compliance	UL 916, FCC part 15 Class B, RoHS Compliant, CE, C-UL listed to Canadian Standards Association (CSA) C22.2 No.	C-UL listed to Canadian Standards Association (CSA) C22.2 No.
Оотрівное	205-M1983 "Single Equipment", C-tick (Australia)	205-M1983 "Single Equipment", BTL B-BC BACnet Building
		Controller listed when the BACnet driver is installed and configured
POWER OPTIONS (USED ONLY WHE	N A JM34-160810 34 POINT I/O MODULE IS NOT PRESENT)	
JENE-PC-PWR or JENE-PC-PWR-UN	Max 1; Direct connect (Pin compatible)	Max 1; Direct connect (Pin compatible)
JENE-PC-WWPM-120	Max 1; Barrel connect external 15 Vdc power supply	Max 1; Barrel connect external 15 Vdc power supply
JENE-PC-BPPM	Max 1; Provides up to 10 minutes of runtime during power outages or disruptions	Max 1; Provides up to 10 minutes of runtime during power outage or disruptions
I/O EXPANSION MODULE OPTIONS		
JM34-160810 - 34 Point I/O	Max 1	Max 1
JM16-080404 - 16 Point I/O	Max 2 with JM34-160810 or Max 4 without JM34-160810	Max 2 with JM34-160810 or Max 4 without JM34-160810
J-T-IO-16-485 - Remote 16 Point I/O	Max 16	Max 16
INTERNAL COMMUNICATION OPTIO	N CARDS	
JENE-PC-LONCARD	Max 2	Max 2
JENE-PC-485	Max 2	Max 2
JENE-PC-232	Max 2	Max 2
IENE DO ODDO W	May 1	Max 1
JENE-PC-GPRS-W	Max 1	TVICK 1

# JENE-PC3000° & JENE-PC6000°

### EMBEDDED CONTROLLERS

#### **Dimensions**

JENE-PC3000° and JENE-PC6000°



### **Ordering Information**

#### JENE-PC SERIES

PART NUMBER	PART DESCRIPTION
JENE-PC3000e	DIN mount JENE-PC3000e controller, using PowerPC 405 400Mhz processor, 256MB DDR2 RAM, 128MB Serial Flash, 512MB Static RAM (SRAM). Powered by one of the two separate plug-in power supply modules, or by wall mount AC power adapter. Controller supports optional I/O expansion modules and internal communications option cards.
JENE-PC6000e JENE-PC6000e-USA	DIN mount JENE-PC6000e controller, using PowerPC 440 524Mhz processor, 256MB DDR RAM, 128MB Serial Flash, 512MB Static RAM (SRAM). Powered by one of the two separate plug-in power supply modules, or by wall mount AC power adapter. Controller supports optional I/O expansion modules and internal communications option cards.

#### POWER SUPPLY OPTIONS (USED ONLY WHEN A JM34-160810 34 POINT I/O MODULE IS NOT PRESENT)

PART NUMBER	PART DESCRIPTION
JENE-PC-PWR	JENE-PC series DIN-mountable power supply; 24 Vac/dc input, 15Vdc at 30W output.
JENE-PC-PWR-UN	JENE-PC series DIN-mountable power supply; Universal 90–263 Vac input, 15Vdc at 30W output.
JENE-PC-WWPM-120	JENE-PC series Wall Power Adapter (Wal-Wart), 120Vac, 60Hz, used to power JENE-PC series controller only.
JENE-PC-BPPM	JENE-PC series Battery Kit. Provides up to 10 minutes of runtime during power outages and disturbances.

#### I/O EXPANSION MODULE OPTIONS

PART NUMBER	PART DESCRIPTION
JM34-160810 JM34-160810-USA	JENE-PC Series DIN mountable, combined 34 points I/O with 24V isolated power module, used to provide I/O points as well as power the controller from a dedicated, external, Class-2, 24Vac transformer or a 24Vdc power supply.
JM16-080404 JM16-080404-USA	JENE-PC Series DIN mountable, 16 point I/O module.
J-T-IO-16-485	JENE-PC Series Remote I/O RS-485 Module DIN-mountable RS-485 comm module that provides 16 points I/O

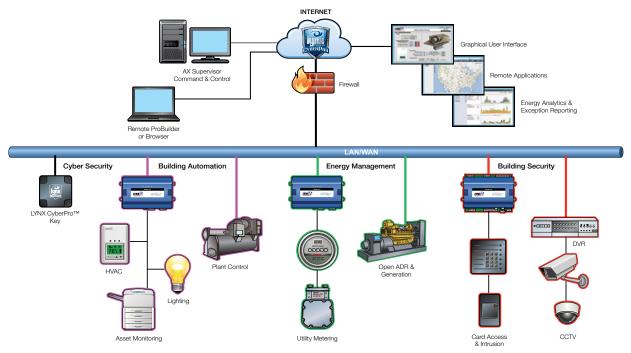
#### INTERNAL COMMUNICATION OPTION CARDS

PART NUMBER	PART DESCRIPTION
JENE-PC-LONCARD	JENE-PC Series FTT-10A LON (LonWorks) option card with a 2-position removable screw-terminal connector plug. LON driver must be purchased separately.
JENE-PC-485	JENE-PC Series Dual, optically-isolated, Port RS-485 option card with two 3-position removable screw-terminal connector plugs
JENE-PC-232	JENE-PC Series Single port RS-232 option card, with a DB-9M connector. Supports baud rates up to 115200.
JENE-PC-GPRS-W	JENE-PC Series GSM cellular modem option card using GPRS (General Packet Radio Service), with onboard socket for SIM card, and a Wyless SIM.
JENE-PC-ZWAVE-US	JENE-PC Series Z-Wave wireless serial gateway between the JENE's NiagaraAX station and an RF wireless Z-Wave domain. Includes RP-SMA coax tilt-and-swivel antenna.

# JENE-PC3000° & JENE-PC6000°

EMBEDDED CONTROLLERS

## JENEsys® Platform



The JENEsys® platform (building operating system) is an open, unified, operational and informational system that combines equipment and device connectivity, integration and interoperability, supervision and control, energy management, visualization and actionable information (data & analytics) into a single, integrated architecture within a cyber-secured environment. JENEsys® is scalable and allows organizations to continually build off the same network deployment and add additional applications as desired.

The deployment of JENEsys® hardware and software is the method by which building automation is expertly configured to a client's best needs. JENEsys® enables users to deploy optimal energy and facility operational strategies, capitalize on accurate and concise intelligence relating to the performance of their facilities, reduce energy consumption and costs, gain knowledge of individual usage and trends related to their building systems and equipment from one source, all within a cloud or hosted environment.

- Choice eliminates building managers and owners from being held captive to proprietary, closed technologies
- Enables multi-vendor integration and interoperability between devices from different manufacturers and disparate systems
- Flexibility/Options allows facility managers, operators and owners to purchase different products from different manufacturers and choose the solutions that best fit their specific needs
- Simplifies facility operations users can manage all of their diverse systems via a single, easy-to-use, web-based interface
- Combines the capabilities of network management, protocol conversion, distributed control, and the user interface into a single software solution that can operate on a wide range of hardware platforms from the very small to the very large
- API's are available to enable independent third parties to develop complementary, enterprise applications that can work effectively with the system

- Data from the system is easily stored and retrieved from a common database and can be used throughout the system.
- Future Expansion offers support for a wide range of applications and the scalability to easily add future service and product upgrades
- Building managers and operators can continue to work with the products and vendors they trust, while gaining all the benefits of an integrated and interoperable system
- Provides operational efficiencies that reduce business risk
- Makes it easier to control and manage buildings and realize facility operational efficiencies, ensure occupant comfort and code compliances
- Reduces system complexity and costs. Maximizes lifetime value of building systems and equipment
- One platform that can be supported by whatever vendor or vendors a building owner, operator or facility manager chooses

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Niagara Framework® is a registered trademark of Tridium, Inc.

