JENE-PC7000
EMBEDDED CONTROLLER
PRODUCT DATA SHEET

LYNXSPRING®

Overview

The JENE-PC7000 series controllers are compact embedded processor platforms using on-board Flash memory for backup, in a expandable DIN-modular package. The JENE-PC7000 combines integrated control, supervision, data logging, alarming, scheduling, and network management functions with Internet connectivity and web serving capabilities. As members of the JENEsys® platform, this embedded device makes 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

A JENE-PC7000 is ideal for any size facility providing distributed control and monitoring of equipment and integrated devices. Optional J-T-IO-16-485 remote input/output modules can be plugged in for applications where local or remote control is required.

The JENE-PC7000 serves 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.

Features

- **Platform:** PowerPC 440Epx @ 652Mhz processor.
- **Standard:** Two RJ-45 Ethernet Ports, one RS-232 Serial Port, one RS-485 Port, two 32-pin option card slots, and one Mini PCI slot for WiFi 802.11 b/g network communications.
- **Interoperable:** Supports BACnet®, LonWorks®, FOX, Modbus®, oBIX, SNMP, and legacy protocols.
- **Versatile:** Fully-customizable with an array of software drivers and custom modules.
- **Reliable:** One GB NAND Flash memory on board for database storage, trend storage and system software.
- **Fast:** Onboard 1GB Ethernet communication provides rapid data transmission.
- **Expandable:** Add up to 16 Optional 16 point remote I/O modules.
- **Implementation:** Stand-alone application control, energy management, and multi-protocol integration.
- **UPS:** Built-in recharging and monitoring support for an external 12V sealed lead-acid backup battery, for longer power fail durations.

JENESYS®
BY LYNXSPRING

Powered by
niagara AX
FRAMEWORK

Specifications

JENE-PC7000

PLATFORM	
Operating System	QNX OS version 6.3.2 with IBM J9 Virtual Machine version 2.3
Processor	PowerPC 440Epx 652 MHz processor
Memory	1 GB DDR-2 333 Mhz RAM (maximum Java heap size 384MB) 1 GB NAND flash memory on board for database storage, trend storage and system software
SRAM Data Recovery Service	Yes
Real-Time Clock	Yes
Oracle Hotspot Java 5 VM	Yes
Niagara AX Version	Requires Niagara AX Release 3.5 or higher
COMMUNICATION PORTS	
Ethernet Port	Two 1 Gigabit Ethernet ports (RJ-45 connectors)
RS-232 Port	One 9 pin D-Shell connector on base board
RS-485 Port	One non-isolated, 3-screw connector on base board
32 Pin Option Card Slots	Two on base board
Mini PCI Slot	One Mini PCI slot for optional JENE-PC-WIFI 802.11 b/g WiFi adapter
CHASSIS	
Construction	Base: Plastic, DIN rail or screw mount options. Cover: Plastic
Cooling	Internal air convection
Dimensions	8.7" (221mm) W x 5.6" (142mm) H x 2.44" (62mm) D
ENVIRONMENT	
Operating Temperature Range	0 to 50°C (32 to 122°F)
Storage Temperature	0 to 70 °C (32 to 158 °F)
Relative Humidity Range	10% to 90% at 25°C (77°F), non-condensing
Storage Relative Humidity Range	5% to 94%, non-condensing
AGENCY LISTINGS	
Compliance	UL 916, FCC part 15 Class A, RoHS Compliant, CE, C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Single Equipment", C-tick (Australia) BTL B-BC listed when optional BACnet driver is used
POWER OPTIONS	
JENE-PC-PWR or JENE-PC-PWR-UN	Max 1; Direct connect (Pin compatible)
JENE-PC-BPPM	Max 1; Provides up to 10 minutes of runtime during power outages or disruptions
I/O EXPANSION MODULE OPTIONS	
J-T-IO-16-485 - Remote 16 Point I/O	Max 16
INTERNAL COMMUNICATION OPTION CARDS	
JENE-PC-LONCARD	Max 2
JENE-PC-485	Max 2
JENE-PC-232	Max 2
JENE-PC-GPRS-W	Max 1
JENE-PC-ZWAVE-US	Max 1

Dimensions

JENE-PC7000
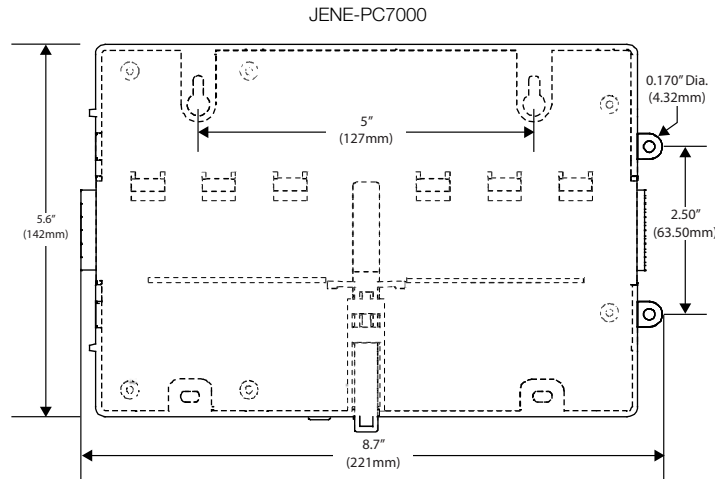
Ordering Information

JENE-PC SERIES

PART NUMBER	PART DESCRIPTION
JENE-PC7000	DIN-mountable controller. PowerPC 440Epx 652 MHz processor, 512MB NAND Flash storage, 1GB DDR-2 system RAM. Includes integral NiMH battery pack, two open enhanced comm option card slots, one open MiniPCI slot (for WiFi 802.11g option card). Not furnished is JENE-PC-PWR-UN universal power supply, or external 12V sealed lead-acid battery and harness.

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
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-Port, optically-isolated 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 on-board socket for SIM card and a Wyless SIM card.
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.

JENEsys® Platform
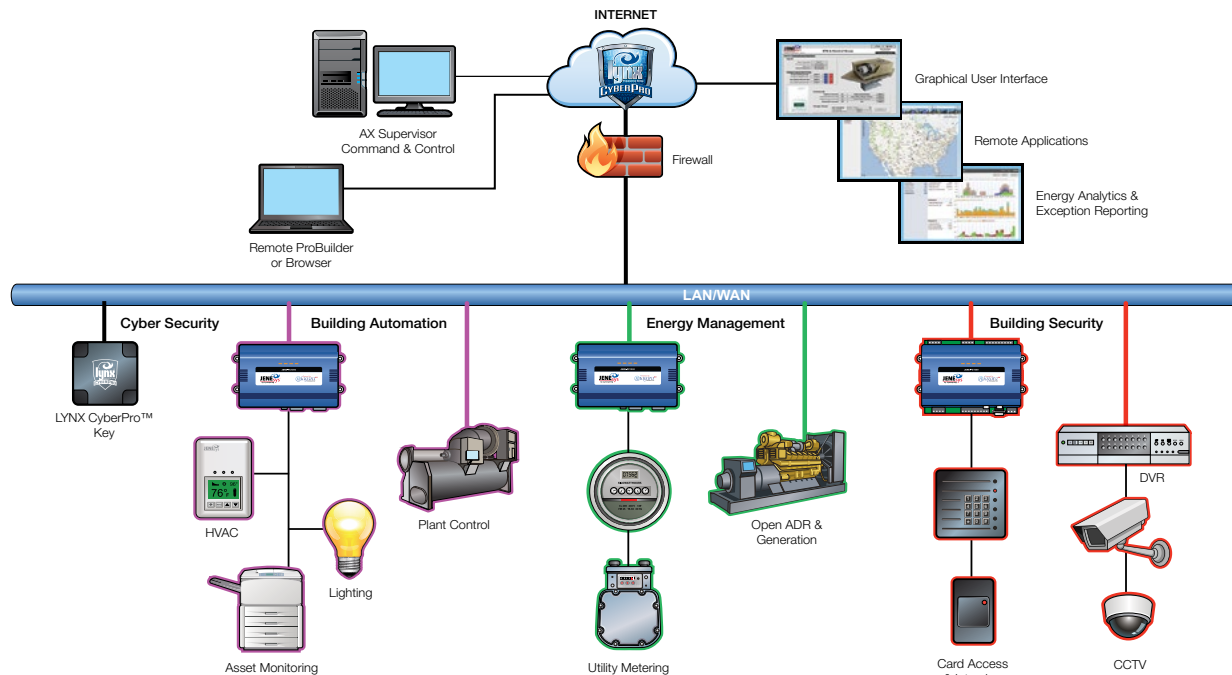
The JENEsys® platform (building operating system) is an open, unified, operational and informational system that combines equipment and device connectivity, integration and interoperability, supervision and control, energy management, visualization and actionable information (data & analytics) into a 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

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

www.lynxspring.com
1210 NE Windsor Drive, Lee's Summit, MO 64086
877-649-5969 | sales@lynxspring.com

© 2015 Lynxspirng, Inc.
ALL RIGHTS RESERVED
07-2015