

Overview

A JENEsys® JENE-PC7000 is on of a next generation emedded server product family from LynxSpring that runs on the standard Niagara^{AX} platform. These embedded server platforms support multiple applications like building automation and energy management on the same platform. The JENE-PC7000 is designed to provide high performance for control functions in a convenient din-rail mounted package. The JENE-PC7000 can be accessed by remote Web browsers over a local Intranet or via the Internet and remotely via an optional GPRS Modem card.

The JENE-PC7000 is part of the JENEsys® portfolio of products, software applications, and tools, designed to integrate a variety of devices and protocols into unified, distributed systems. LynxSpring's JENEsys® products are powered by the Niagara^{AX} Framework®, the industry's leading software technology that integrates diverse systems and devices into a seamless system. Niagara^{AX} supports a range of protocols including LonWorks®, BACnet®, Modbus, oBIX and many Internet standards. The Niagara^{AX} Framework also includes integrated management tools to support the design, configuration and maintenance of a unified, real-time controls network.



Application

A JENE-PC7000 controller is ideal for medium to larger facilities, remote sites and for distributing control and monitoring throughout large facilities. The JENE-PC7000 supports a wide range of field buses for connection to remote I/O and stand-alone controllers.

A JENE-PC7000 serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet, dial-up or GPRS modems. In larger facilities, 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.

With its on-board battery charging and monitoring circuit, the JENE-PC7000 can provide uninterupted building monitoring and control during power interruptions. Up to 1 GB RAM and 1 GB Flash memory are available to provide the capacity needed for the graphics, trend data, applications, and history required for larger systems.

Features

- QNX® Operating System with IBM J9 JAVA Virtual Machine
- Supports standard Niagara^{AX} objects and feature set components
- Powerful 440Epx PowerPC processor @ 667 Mhz.
- Scalable Plug-in DDR-2 memory (field upgradable)
- Gigabit Ethernet & USB ports
- RS-232 and Isolated RS-485 ports
- Communication option slots for optional communication interface cards
- Supports Serial RS-232, RS-485 communication protocols with optional drivers
- Supports LonWorks with optional communication card, BACnet, Modbus, Sedona Framework with optional wireless option card, and remote I/O modules
- Power- 15 volts DC @ 20 W from optional universal input Din-rail mounted supply
- Rechargeable internal NIMH battery backup, for short term power fail events
- Built-in recharging and monitoring support for an external 12V sealed lead-acid backup battery, for longer power fail durations. Built-in contact inputs are also available for UPS monitoring
- Multiple Mounting Options - DIN rail mounting or panel mounting using tabs on unit base

Specifications

Hardware Platform:

- 667 MHz 440Epx Power PC processor
- Base unit - 1 GB DDR-2 333 Mhz RAM
- One GB NAND flash memory on board for database storage, trend storage and system software

Operating System:

- QNX OS version 6.3.2 with IBM J9 Virtual Machine version 2.3
- Requires Niagara^{AX} Release 3.5 or higher

Communications:

- Two 1 Gigabit Ethernet ports
- Two USB 2.0 ports (for future application use)
- One RS-232 Port (9 pin D-shell connector)
- One isolated RS-485 Port (3-screw connector on base board)
- Two 32 Pin communication slots for optional interface card use

Battery Backup:

- Internal battery backup to allow system database save after power failure, plus maintenance of Real-time clock for up to one year
- Optional external 12 Vdc Sealed Lead Acid battery(s) - runtime dependent upon AH rating of battery(s) and connected devices.

Power Input:

- 15 Vdc at 20 Watts max. Uses
- Note: The JENE-PC-WWPM-120 is supplied with a "barrel plug" which must be removed and the wires attached to the JENE-PC7000 terminal connecto to use this power option.

Chassis:

- Housed in molded plastic enclosure
- Cooling: Internal air convection
- Dimensions (approx): 8 1/2" wide X 6" high X 2 5/8" tall (215.9 mm wide X 152.4mm high X 68.3 mm tall)
- Panel mounting via screws or standard Din rail
- Weight: Net 4 lbs. (1.814 kg), Gross 5 lbs. (2.268 kg)

Environment

- 0° to 50° C (32°F to 122°F); 0-90% RH, non-condensing (for electronics)

Agency Listings

- 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"
- BTL B-BC BACnet Building Controller listed when the BACnet driver is installed and configured.

Ordering Information

JENE-PC7000 Series Controller

Model #	Description
JENE-PC701G	JENE-PC7000 Controller Includes 1GB RAM/1 GB Flash memory, 1 RS-232 and 1 RS-485 port, 2 Gigabit Ethernet ports, 2 USB ports, 2 standard communication card slots, and internal battery backup; power module must be selected separately. Standard features include Niagara station and Web User Interface. Standard drivers include oBIX Client / Server and Niagara Network (Fox) Client / Server. The JENE-PC701G is designed for DIN rail or surface mounting. Requires AX Release 3.5 or higher. Notes: Only the universal power supply; Wall Adaptor and remote IO module can be with this JENE®. Wall Adaptor requires modification..

Optional JENE-PC7000 Series I/O Module

Model #	Description
J-T-IO-16-485	JENE-PC Series Remote 16 Point I/O Expansion Module. Made in USA

Optional JENE-PC7000 Series Communication Cards

Model #	Description
JENE-PC-LONCARD	JENE-PC Series LonTalk Communication Card. Made in USA
JENE-PC-485	JENE-PC Series Dual Port RS-485, electronically isolated Communication Card. Made in USA
JENE-PC-232	JENE-PC Series RS-232 with 9 pin D-shell connector Communication Card. Made in USA
JENE-PC-MODEMCARD	JENE-PC Series 56 Kbps Modem Card. Made in USA
JENE-PC-GPRS-W	JENE-PC Series GPRS Modem Card - Include SIM card. Made in USA
JENE-PC-ZWAVE-US	JENE-PC Series ZWAVE Card - Communicates over radio 908.42 MHz Frequency at 40 Kbps. Made in USA
JENE-PC-FUSCARD	JENE-PC Series Fusion/Sedona Wired/Wireless Communication Card with Antenna. Made in USA

Optional JENE-PC7000 Series Power Supplies

Model #	Description
JENE-PC-WWPM-120	JENE-PC Series Wall Power Module - 120 Vac, 60 Hz (Wal-Wart)
JENE-PC-PWR-UN	JENE-PC Series 90-263 Vac 50/60 Hz Autosensing Power Supply Module, Din-Rail Mountable. Made in USA

