

Overview

The JENEsysONE equipment controller is a programmable, compact, embedded application specific controller combining integrated control, supervision, data logging, alarming and scheduling with Internet connectivity and web serving capabilities. The JENEsysONE equipment controller is used to monitor, command and aggregate data for HVAC equipment, lighting and utility meters with a base point count of 34 points of configured I/O consisting of 16 universal inputs, 8 analog outputs and 10 digital outputs. The I/O module contains a 24Vac/dc power input that provides power for the whole unit making this package ideal for equipment control applications. The I/O point count can be increased from 34 points to 50 or 60 points by adding one or two JENEsysONE JO-16 I/O modules. The JO-16 I/O module consists of 8 universal outputs, 4 analog outputs and 4 digital outputs.



The JENEsysONE controller is part of Lynxspring's portfolio of JENEsys® branded Internet based automation technology and device to enterprise integration solutions for Building Automation, Energy Management, Security, Equipment Control and Specialty applications. JENEsysONE controllers are application specific programmable equipment controllers with the capability to operated as stand-alone units or as integrated devices to a higher order system allowing peer-to-peer communication utilizing optional communication protocols such as BACnet™, LonWorks™, Modbus, oBIX or Niagara Fox.

Applications

The JENEsysONE equipment controller is ideal for controlling and monitoring building systems including HVAC, lighting and utility meters. The JENEsysONE equipment controller can be easily managed through its web serving capabilities when equipped with the JO-WebUI License; where it serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet. The JENEsysONE equipment controller can also be equipped with a JENE-PC-LCD-R Operator's Panel for easy equipment start-up and to implement on-site adjustments of the controlled equipment. Equipment control applications are generated using JENEsys® ProBuilder, a PC-based graphic engineering tool which simplifies the engineering process and assists in the startup and trouble shooting of the application or you can choose to install one of Lynxspring's pre-engineered JENEsys Equipment Application Profiles (JEAP™).

JEAPs have been created to help decrease engineering time and can be modified to meet the equipment's control application needs. JEAPs ready for download include applications for:

- Constant Volume Air Handling Units
- VAV Air Handling Units
- Rooftop Units
- Make-up Air Handling Units
- Hot Water Plants
- Chilled Water Plants
- Lighting Control Scenes
- Revenue Grade Consumption & Demand Metering

In addition to these control applications, the JENEsysONE equipment controller also performs 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

- Base point count of 34 points of configurable I/O; 16 universal inputs, 8 analog outputs and 10 digital outputs.
- Modular design meets the need of any sized equipment by allowing the addition of one or two JO-16 16 point I/O modules increasing the base I/O point count of configurable I/O from 34 points to 50 or 66 points.
- Performs 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.
- Designed to operate as a stand-alone device or can communicate multiple protocols to be integrated into a system of devices.
- Specific equipment applications can be generated using JENEsys ProBuilder or with a number of pre-engineered, interchangeable, plug-in JENEsys Equipment Application Profiles (JEAPs).
- Din Rail mountable for quick installation.
- When equipped with the JO-WebUI License, the Web User interface serves rich presentations and live data to any browser.

Specifications

Platform:

- PowerPC 405EP 250MHz Processor
- 64MB SDRAM & 64 MB Serial Flash
- Battery Backup - 5 minutes typical - shutdown begins within 10 seconds
- Real-time clock - 3 month backup max via battery life

Operating System:

- QNX RTOS
- IBM J9 JVM Java Virtual Machine
- Niagara^{AX}

Communications:

- 2 Ethernet Ports - 10/100 Mbps (RJ-45 Connectors)
- 1 RS-232 Port (9 pin D-shell connector)
- 1 RS-485 Port (3-screw connector on base board)
- 2 32-Pin option card slots for communication cards

Power Input:

- 24Vac/dc input power supply
- Termination is located on the JO-34 I/O module

34 Points of Base I/O (JO-34):

- 16 Univsal Inputs (10K type III thermistors, 0-1000 ohm, 0-10V and 0-20mA with external resistor)
- 10 Relay Outputs (Form A contacts, 24Vac @ 0.5 amp rated)
- 8 Analog Outputs (0-10Vdc)

Optional 16 Point I/O Module (JO-16 - Max 2/JENEsysONE Controller):

- 8 Univsal Inputs (10K type III thermistors, 0-1000 ohm, 0-10V and 0-20mA with external resistor)
- 4 Relay Outputs (Form A contacts, 24Vac @ 0.5 amp rated)
- 4 Analog Outputs (0-10Vdc)

Chassis (JO-PC1 and JM34 I/O Module):

- Construction: Plastic, din rail or screw mount chassis, plastic cover
- Cooling: Internal air convection
- Dimensions: 13.094" (33.26 cm) W x 4.820" (12.24 cm) H (including connectors) x 2.438" (6.19cm) D

Environment

- Operating temperature range: 0° to 50° C (32°F to 122°F)
- Storage temperature range: 0° to 70°C (32°F to 158°F)
- Relative humidity range: 5% to 95% ,non-condensing

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 JO-BACnetIP or JO-BACnetMSTP drivers are installed and configured
- C-tick (Australia)

Ordering Information

Model #	Description
JENEsysONE	JENEsysONE Equipment controller consists of a JO-PC1 controller , a JO-34 I/O module and one communication server/slave protocol. The JO-PC1 has 64 MB RAM/64 MB Flash, 2 10/100 Mb Ethernet ports, 1 RS-485 serial port, 1 RS-232 serial port, and 2 communication card option slots. The standard license includes Niagara station and oBIX Server communication capabilities. Optional slave/server communication protocols available for the JENEsysONE Equipment Controller are BACnet IP, BACnet MSTP, LonWorks, NiagaraFOX, Modbus TCP and Modbus RTU. The JO-34 has 34 logic-controlled I/O points comprised of 16 universal inputs, 10 form "A" (SPST) relay outputs, and 8 analog (voltage only) outputs. The JO-34 provides power for the whole unit by using either an externally supplied 24Vac transformer or 24Vdc power supply. Notes: The JENEsysONE Equipment controller is designed for DIN rail mounting. External power supply or transformer is not included. Check 'Power Supply' or 'Transformer' tabs for pricing. Please notify orders@lynxspring.com which communication protocol you would like. JENE-PC-LONCARD must be purchased separately if Lon is the selected protocol.
JO-16	16 Point I/O Expansion Module. Maximum 2 per JENEsysONE Controller.
JO-WebUI	JENEsysONE WebUI License.
JENE-PC-LONCARD	JENE-PC series LonWorks Communication Option Card. Note: Must be purchased of LonWorks is the selected communication protocol.
JENE-PC-SRAM	JENE-PC series controller static RAM data backup Option card. This card allows for the elimination of the JENE-PC-BPPM or JENE-PC7000-BATT battery located on a JENE-PC series controller. If used in conjunction with a battery, the JENE-PC-SRAM allows for lonter battery runtime on a JENE-PC series controller. Note: Requires NiagaraAX 3.6 or later.

