

JACE®-700

Overview



The JACE-700 is one of a next generation embedded server product family from Tridium 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 JACE-700 is designed to provide high performance for control functions in a convenient din-rail mounted package. The JACE-700 can be accessed by remote Web browsers over a local Intranet or via the Internet and remotely via an optional GPRS Modem card.

Features

- QNX® Operating System with Oracle Hotspot Java 5 VM
- Supports standard Niagara objects and feature set components
- Powerful 440Epx PowerPC processor@652 MHz
- 1 GB DDR2 RAM memory
- Gigabit Ethernet ports
- RS-232 and Isolated RS-485 ports
- JACE 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, Remote I/O modules, and future industrial field-bus interfaces, etc.; additional driver software will be required
- 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
- Supports optional WiFi communications card for 802.11 b/g network communications

Ordering Information

Item	Description
T-700	Din-Rail or Surface Mounted JACE with 1 GB MB DDR-2 RAM / 512 MB Flash memory, one RS-232 and one RS-485 port, two Gigabit Ethernet ports, two standard JACE communication card slots, and internal battery backup; power module must be selected separately. Requires Niagara ^{AX} Release 3.5 or higher. Note: Base memory enables 384 MB of Java heap space.
T7-WIFI	JACE-700 WiFi option card; enables 802.11 b/g wireless network communication to a customer Wireless network. Does not use option card slots in JACE-700; uses dedicated socket for this card.
NPB-T700-BATT	Replacement Backup battery assembly
WPM-US	Wall power module; US plug. See Note below under Power Input.
WPM-UK	Wall power module: UK plug. See Note below under Power Input.
WPM-EUR	Wall power module: European plug. See Note below under Power Input.
NPB-PWR-UN	Universal Power Supply module (90-263 VAC, 50/60 Hz. Din Rail or panel mount.
NPB-GPRS-W	Optional GPRS Modem communications card with SIM card for connection via Wireless network; Wireless is the only approved service provider for the continental US, consumes one option card slot.
NPB-232	Optional RS-232 communication card, consumes one option card slot
NPB-2X-485	Optional dual RS-485 communication ports on one option card; consumes one option card slot
NPB-LON	Optional Lon FTT10A communications card, consumes one option card slot. Lon driver must be ordered separately.

Note: Refer to current price list for additional options.

Specifications

- 652 MHz 440Epx Power PC processor
- QNX OS with IBM J9 VM (AX 3.5) or Oracle Hotspot Java 5 VM (AX 3.6 or higher)
- Requires Niagara^{AX} Release 3.5 or higher.
- Base unit – 1 GB DDR-2 333 MHz RAM
- 512 MB NAND flash memory on board for database storage, trend storage and system software
- Two 1 Gigabit Ethernet ports
- One RS-232 and one isolated RS-485 ports
- Internal battery backup to allow system database save after power failure, plus maintenance of Real-time clock for up to one year.
- Two JACE communication slots for optional JACE communication interface card use
- Optional WiFi communications card for 802.11 b/g network communications

Power Input

Uses WPM wall modules or NPB-PWR-UN universal power supply module Power required is 15 volts DC at 20 watts Max.

Note: The WPM is supplied with a "barrel plug" which must be removed and the wires attached to the JACE terminal connector to use this power option.

Environmental Conditions

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

Chassis

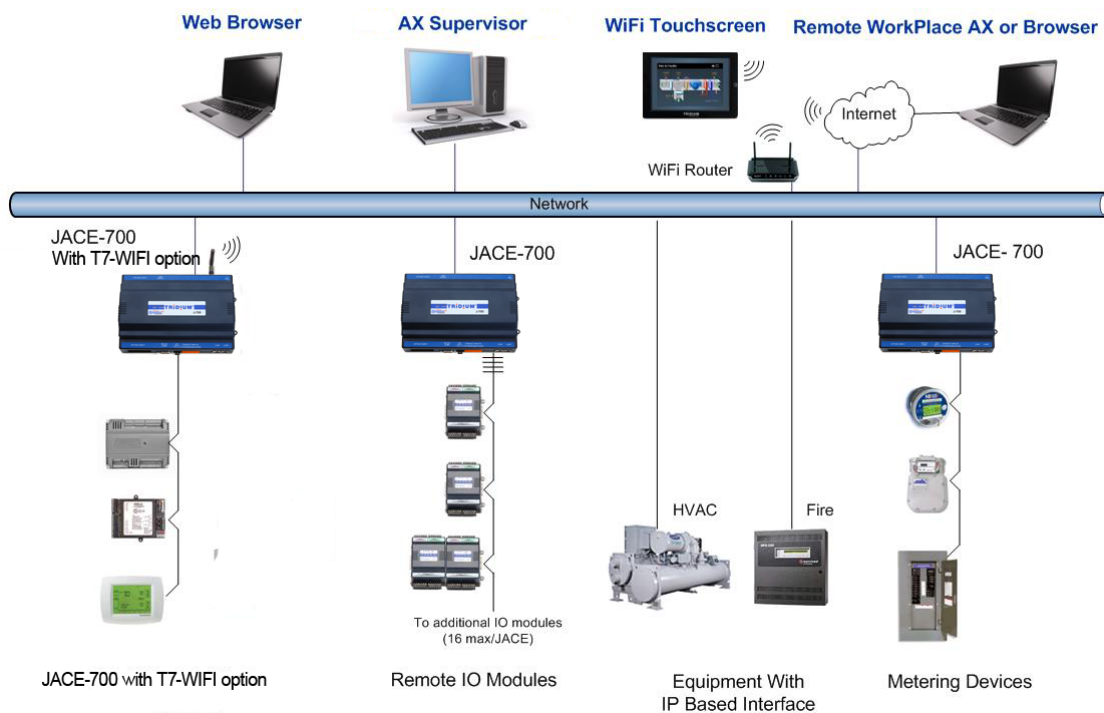
- Housed in molded plastic enclosure
- Cooling: Internal air convection
- Dimensions (approx): 8 1/2" wide X 6" high X 2 5/8" tall (215.9 mm wide X 152.4 mm high X 68.3 mm tall)
- Panel mounting via screws or standard Din rail.
- Weight: Net 4 lbs. (1.814 kg), Gross 5 lbs. (2.268 kg)

Agency listings

- UL 916
- C-UL listed to Canadian Standards Association (CSA)
- C22.2 No. 205-M1983 "Signal Equipment"
- CE
- FCC part 15 Class A.
- RoHS compliant
- BTL B-BC listed when optional BACnet driver is used

Architecture

Typical Architecture



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