

# JACE® T-3E-MC Controller

## Overview



Tridium's JACE T-3E-MC Controller is part of the Tridium portfolio of Java-based controller/server products, software applications and tools, designed to integrate a variety of devices and protocols into unified, distributed systems. Tridium products are powered by the Niagara<sup>AX</sup> Framework®, the industry's leading software technology that integrates diverse systems and devices into a seamless system. The Niagara<sup>AX</sup> Framework includes integrated management tools to support the design, configuration and maintenance of a unified,

real-time controls network. The Input/Output module with low voltage power supply makes this package ideal for equipment control.

## Applications

The JACE T-3E-MC Controller is ideal for controlling and monitoring a building system including HVAC equipment, lighting, and meters. The T-3E-MC Controller is a bundled product consisting of a JACE-3E controller paired with an IO-34 module that provides 34 points for local control. The IO count can be expanded with up to two additional 16-point NDIO modules and four 16-point remote NRIO modules. In addition to local control, the T-3E-MC is licensed for up to five remote devices that can be integrated to the controller into the controller via Lon, BACnet or Modbus. In total, the T-3E-MC can integrate up to 150 points. The T-3E-MC serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet. In larger facilities, multi-building applications and large-scale control system integrations, Niagara<sup>AX</sup> Supervisor™ software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of JACEs into a single unified application.

## Features

- 34 hardware control points (expandable with NDIO and NRIO modules).
- Pre-Licensed for five remote devices – either BACnet, Modbus or Lon
- Web User interface serves rich presentations and live data to any browser
- Two Communications board sockets for optional communications card
- Built-in 24 volt AC/DC input power supply
- Din Rail mountable for quick installation
- Supports up to 150 total points

## Ordering Information

Part Number	Description
T-3E-MC	JACE®-3E with 34 point I/O module. Features include Niagara station and Web User Interface. Standard drivers include oBIX Client / Server and Niagara Network (Fox) Client / Server. Includes Modbus, BACnet and Lon drivers limited to a total of 5 devices or 150 points per controller. Requires 24 VAC or 24 VDC Power Source. Option cards required for communication to remote devices are not included. Battery not included. Requires AX 3.8 or later.
<b>Optional Communication Cards</b>	
NPB-LON	78 Kbps FTT 10 A Lon® adapter
NPB-232	Single Port RS 232 Option Card
NPB-2X-485	Dual Port RS-485 Option Card
NPB-GPRS-W	GPRS Modem option, bundled with Wyless SIM card
<b>Optional I/O Expansion Modules</b>	
T-IO-16	Includes 8 Universal Inputs, 4 Form A Relay Outputs, and 4 0-10 VDC Analog Outputs. Mounts in-line with T-3E-MC on DIN rail. T-3E-MC supports up to 2 IO-16 modules.
T-IO-16-485	Includes 8 Universal Inputs, 4 Form A Relay Outputs, and 4 0-10 VDC Analog Outputs. May be mounted remotely. Communicates to T-3E-MC via a dedicated RS-485 port. T-3E-MC supports up to 4 IO-16-485 modules.
<b>Optional Power Accessories</b>	
NPB-BATT	Battery module. Provides up to 10 minutes of backup power.

## Specifications

### General

- T-300E and T-IO-34 Module with optimized license for equipment control
- Real-time clock – 2 week backup
- Niagara<sup>AX</sup> 3.8 or later
- Oracle Hotspot Java Virtual Machine

### IO-34 - 34 Point I/O Module

- 16 Universal Inputs (Type 3 (10k) Thermistors, 0-1000 ohm, 0-10 volts, 0-20 mA with external resistor)
- 10 relay outputs (Form A contacts, 24 VAC @.5 amp rated)
- 8 analog outputs (0-10 volt DC)

### Communications

- 2 Ethernet Ports – 10/100 Mbps (RJ-45 Connectors)
- 1 RS 232 Port (RJ-45 connector)
- 1 RS 485 non isolated port (Screw Connector on base board)
- 2 card slots for optional communication cards

### Environment

- Operating temperature range – 0° to 60°C (32°F to 140°F)
- Operating temperature range – 0° to 50°C (32°F to 122°F) with battery
- Storage temperature range – 0° to 60°C (32°F to 140°F)
- Relative humidity range – 5% to 95%, non-condensing

### Power Input

- 24 Volt AC or DC input power supply
- Termination is via screw type terminal block

### JACE and IO-34 Chassis

- Construction – Plastic, din rail or screw mount chassis, plastic cover
- Cooling – Internal air convection
- Dimensions (JACE) – 6.313" (16.04 cm) W x 4.820" (12.24 cm) H (including connectors) x 2.438" (6.19 cm) D
- Dimensions (IO-34) – 5.969" (15.16 cm) W x 4.820" (12.24 cm) H (including connectors) x 2.438" (6.19 cm) D
- Dimensions for both JACE and IO-34 including Mounting Ears 13.094" (33.26 cm) W x 4.820" (12.24 cm) H (including connectors) x 2.438" (6.19 cm) D

### Agency Listings

- RoHS Compliant
- UL 916
- C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment"
- CE
- FCC part 15 Class B
- C-tick (Australia)

RoHS  
Compliant

