

## Cost-effective, monitoring and control with GPRS

The M2M JACE is specifically designed for remote monitoring and control applications in smaller installations, particularly for retrofit to existing sites. It combines integrated control, alarming, data logging, scheduling, supervision and network management functions in a compact, wall mounting package. In addition to wired Ethernet and serial ports, there are 16 I/O points built-in, as well as a 230V PSU and an (optional) GPRS modem. The cable management features included make this a standalone device, reducing installation time and cost. The M2M JACE makes it possible to control and manage external devices over the Internet and present real time information to users in web-based graphical views.



### Key features

- Small compact wall-mount design with cable management is easy to install
- Embedded Power PC platform @ 250 MHz running the Niagara<sup>AX</sup> Framework
- Web User interface serves rich presentations and live data to a browser
- RS 232 and RS 485 communication ports
- Plug in communications card option slot
- Universal Mains power supply built in
- Onboard 16 points of I/O
- Optional GPRS Modem for remote internet access and alarm monitoring
- Supports open communication networks; LON, BACnet, EIB-IP, Modbus, M-bus, SNMP, Z-wave, oBIX
- Full network management of LONworks devices
- Built-in Web Server provides Graphical User Interface via Browser
- Different versions match different types and sizes of application

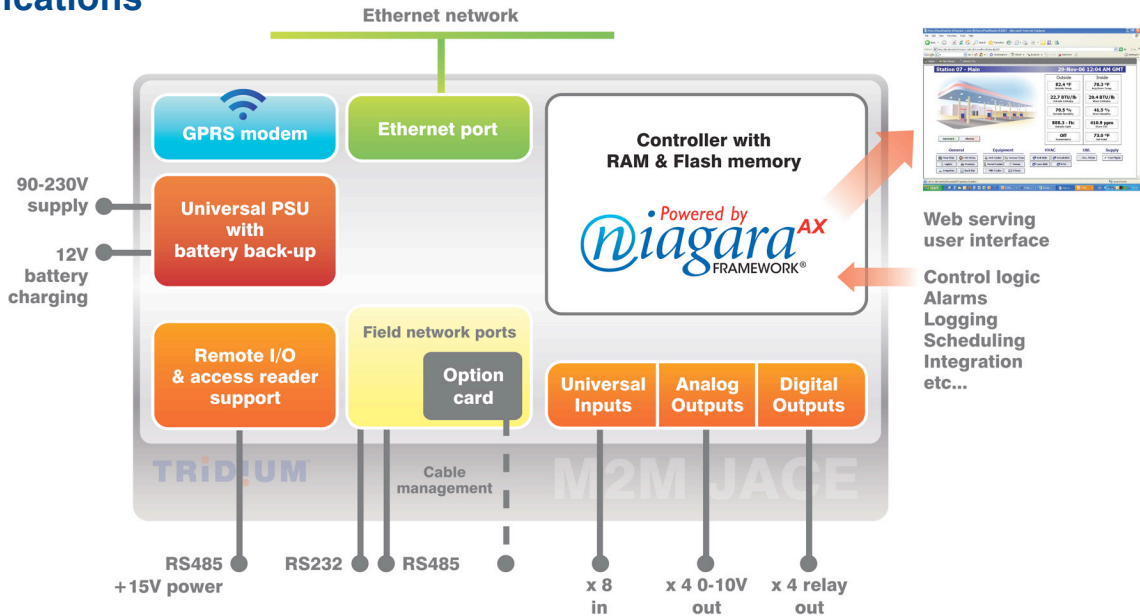
### Applications

The M2M JACE is ideal for a wide range of applications. 16 on-board inputs and outputs are included for applications where local control is required, with additional I/O or third party devices connected via the serial and IP ports.

In small facility applications, the M2M JACE is all you need for a complete system; the M2M JACE serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet, or via the optional built-in GPRS modem.

In larger facilities, multi-building applications, and large-scale control system integrations, Niagara<sup>AX</sup> Supervisor<sup>TM</sup> can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of JACEs into a single unified application. The 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, or GPRS modems.

## Specifications



### Platform

IBM PowerPC processor 405EP: 250 MHz  
 DRAM: 128MB  
 Serial Flash: 64MB  
 Battery back-up 5 minutes typical  
 – shut down begins within 10 secs  
 Database storage and Real-time clock  
 – 3 month battery back-up

### Communications

2 Ethernet Ports - 10/100Mb (RJ45 connectors)  
 1 RS232 port (9 pin D-connector)  
 1 RS485 non-isolated port (3 way two part connector)  
 GPRS modem is a factory installed option

### Integrated Inputs and Outputs

8 universal inputs  
 4 digital (relay) outputs  
 4 analog (0-10V) outputs  
 All IO terminals via removable two part screw terminals

### Universal Inputs (UI) for:

- Type 3 (10K) Thermistors, input accuracy +/-1% span
- Other types may be supported by entering custom non-linear curve interpolation points for each non-linear input
- 0-10Vdc acc. +/- 2% of span without user calibration
- 0-20mA acc. +/- 2% of span, without user calibration  
 Uses externally connected resistor for current input (provided) Self-powered or board powered sensors accepted
- Volt free contact, 300-uA short-circuit current Pulsing dry contact up to 20Hz; 50% duty cycle

### Digital Outputs (DO):

Form A relay contacts max 24Vac or dc, 0.5A max current; suitable for on / off control only, floating control not supported

### Analog Outputs (AO)

0-10Vdc 4mA drain max.

### Optional Communications Cards

(plug-in, internally mounted) one of  
 LON adaptor FTT-10A, 2 Channel RS485, RS232

### Power Supply

90 - 240Vac 50-60Hz universal PSU

### Product Housing

Construction: Plastic, screw mount chassis  
 Cooling: Internal air convection  
 Wiring access holes provided at top and bottom of case and via knockouts on base for hidden wiring

### Operating System

QNX operating system, IBM J9 Java Virtual Machine  
 Niagara<sup>AX</sup> 3.4 or later

### Environment

Operating temperature range: 0 to 50°C  
 Storage Temperature range: 0 to 70°C  
 Relative humidity: 5 to 95%, non-condensing  
 Enclosure rating: IP40 – designed for indoor spaces

### Agency Listings

CE, UL 916, C-UL listed to CSA (Canada)  
 C22.2 No. 205-M1983 "Signal Equipment"  
 FCC part 15 Class A, C-tick (Australia)

### How to order

No	With GPRS	Description
JHX256	JGX256	48MB Java Heap No license restriction
JHX246	JGX246	16MB Java Heap No license restriction
JHX236	JGX236	16MB Java Heap 450 KRU Limit Drivers limited to 200 pts
JHX216	JGX216	16MB Java Heap 300KRU limit Drivers limited to 8 devices



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