

## **IT-8000** Niagara 4 Network Controller / Webserver

The IT-8000 is a compact, embedded IoT (Internet of Things) controller and server platform for connecting multiple and diverse devices and sub-systems. With Internet connectivity and Web-serving capability, the IT-8000 controller provides integrated control, supervision, data logging, alarming, scheduling and network management. It streams data and rich graphical displays to a standard Web browser via an Ethernet or wireless LAN, or remotely over the Internet.

The licensing model for the IT-8000 controller is simplified and features standard drivers along with optional I/O and field bus expansion modules for ultimate flexibility and expandability. The IT-8000 controller operates with Niagara 4, the latest version of the Niagara Framework®, for optimum performance. In larger facilities, multi-building applications and large-scale control system integrations, Niagara 4 Supervisors can be used with IT-8000 controllers to aggregate information, including real-time data, history and alarms, to create a single, unified application.

With simple configuration, tool-less installation, low-cost integration and high-powered performance, the IT-8000 controller is a dramatic evolution in connecting and controlling devices worldwide.

## HARDWARE SPECIFICATIONS

TI AM3352: 1000MHz ARM® Cortex™-A8

1GB DDR3 SDRAM

Removable micro-SD card with 4GB flash total storage/2GB user storage

Wi-Fi (Client or WAP)
IEEE802.11a/b/g/n
IEEE802.11n HT20 @ 2.4GHz
IEEE802.11n HT20/HT40 @ 5GHz
Configurable radio (Off, WAP, or Client)
WPAPSK / WPA2PSK supported

USB type A connector Back-up and restore support

(2) isolated RS-485 with selectable bias and termination

(2) 10/100MB Ethernet ports

Secure boot

24 VAC/DC power supply

Runs Niagara 4.1 and later

Real time clock

Batteryless



## **EXPANSION MODULES**

# MAXIMUM EXPANSION MODULES SUPPORTED

NPB-8000-LON : 4 NPB-8000-232 : 4

NPB-8000-2X-485 : 2

## MAXIMUM IO MODULES SUPPORTED

IT-IO-16-485:16

## I/O CONFIGURATION

#### **MAXIMUM COMBINATIONS**

EXPANSION 1	EXPANSION 2	EXPANSION 3	EXPANSION 4
RS-232 or LON	RS-232 or LON	RS-232 or LON	232 or RS-LON
(2) RS-485	RS-232 or LON	RS-232 or LON	RS-232 or LON
(2) RS-485	(2) RS-485	RS-232 or LON	
(2) RS-485	(2) RS-485		



## **SPECIFICATIONS**

## **AGENCY CERTIFICATIONS**

UL 916

CE EN 61326-1

FCC Part 15 Subpart B, Class B | FCC Part 15 Subpart C

C-UL Listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment"

1999/5/EC R&TTE Directive

CCC | SRRC | RSS | RoHS

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature: -20 to 60°C

Storage Temperature: -40 to 85°C

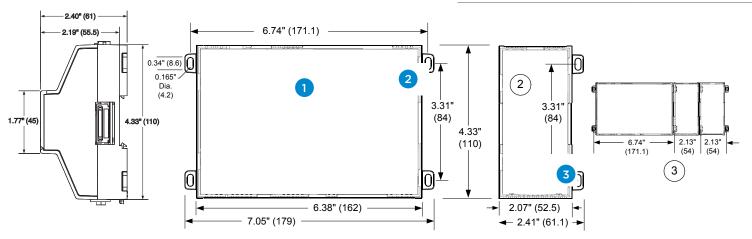
Humidity: 5% - 95% Non-condensing

Shipping & Vibration: ASTM D4169, Assurance Level II

MTTF: 10 years+

#### **MOUNTING & DIMENSIONS**

- 1T-8000 controller. Allow at least 1.5" (38mm) clearance around all sides and minimum 3" (76mm) at bottom for Wi-Fi antenna
- 2 Expansion module. Up to four (4) may be used. See "Expansion Modules" and "I/O Configuration"
- 3 Distances between center tabs from one unit to another unit



Compatible with (DIN43880) enclosures

Suitable for mounting to a panel or to an EN50022 standard 35mm rail



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