



NT-BAS



NT-LON



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## BACnet Gateway

# NT-LON

## Echelon Gateway

### GENERAL DESCRIPTION:

The NT-BAS and NT-LON Gateways are pre-programmed solutions designed to provide a virtual plug-and-play, easy, complete bi-directional protocol translation for Net/X™ RP32-xx and UP32-xx thermostat communications platforms. The NT-BAS provides translation for BACnet MS/TP, BACnet/IP, Metasys N2 by JCI, Modbus RTU, and Modbus TCP. The NT-LON gateway provides translation for Echelon LonWorks.

There are no configuration files to download in the field and all configurations are available to the user/installer simply by selecting the proper DIP switches for the protocol desired and selecting the thermostat model(s) in the embedded web server.

### STANDARD FEATURES:

- Profile Selection via Integrated Web Server for Configuration
- Configuration Auto-Selector (via DIP switches)
- Auto-Discover Known Devices
- NT-BAS Supports 1 x Ethernet and 2 x RS-485 Connectivity
- NT-LON Supports 1 x Ethernet, 1 x RS-485 and 1 x LonWorks
- Add up to 31 Full-Load RS-485 Devices on Each RS-485 Port
- Supports Net/X™ Communications Platforms; Wi-Fi, Ethernet
- Supports all Net/X™ RP32 and UP32 Programmable Thermostat Models
- Supports Read/Write of all real-time points of operation
- Supports Read of all real-time remote sensor points, digital inputs and occupancy
- Supports Read/Write of all Schedules, Overrides and Vacation Modes
- Up to 40 Thermostats per Gateway (dependent on thermostats models selected)
- BTL Registered and LonMark Certified
- Field Upgradable

BACnet is a registered trademark of ASHRAE  
 Metasys is a registered trademark of Johnson Controls Inc.  
 LonWorks is a registered trademark of Echelon Corporation

## SPECIFICATIONS:

### Power Requirements

Power: 9-30 VDC or 12-24 VAC  
(RS-485 = 15-30 VDC or 12-24 VAC)

Current draw @ 12V

- RER @ 12V = 240 mA
- LER @ 12V = 250 mA
- FPC-N36 @ 15V = 200 mA
- FPC-N37 @ 15V = 210 mA

### Environmental

Operating Temp.: -40°F to 167°F (-40°C to 75°C)  
Relative Humidity: 5-90% RH, non-condensing

### Enclosure

Dimensions: 4.5 x 3.2 x 1.6 in. (L x W x H)  
(11.5 x 8.2 x 4.0 cm)

### Approvals

- BACnet Testing Labs (BTL) B-ASC
- LonMark 3.4 Certified
- TUV approved to UL 916 EN 60950-1, EN 50491-3 and CSA C22-2 standards
- RoHS Compliant
- DNP3 Conformance Tested
- CE & FCC Approved

### BACnet Support

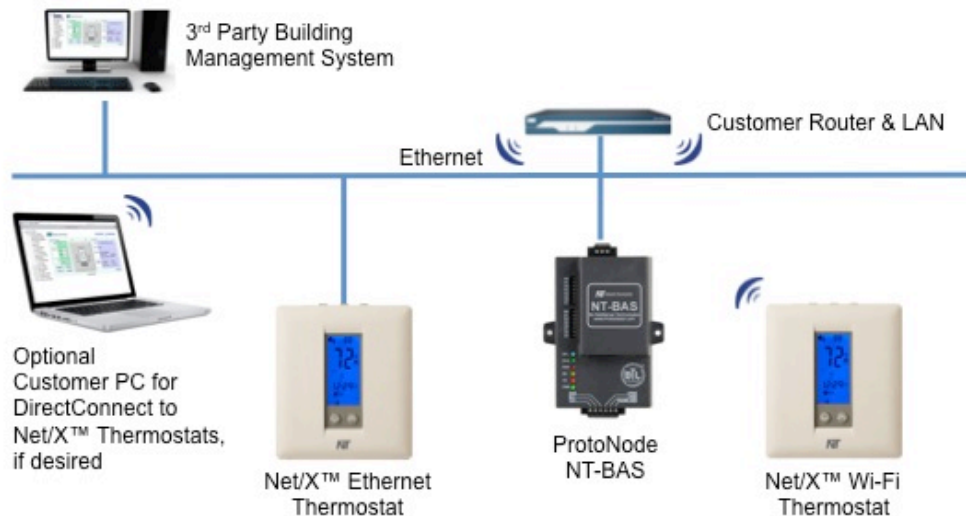
- Alarm & Event notification read properties multiples, and more
- BACnet COV's, 20,000
- Support up to 20,000 Host & Field points
- DIP switches are for setting MAC Address, Node-ID, Baud Rate on the RS-485 Field protocol

### LonMark Certification

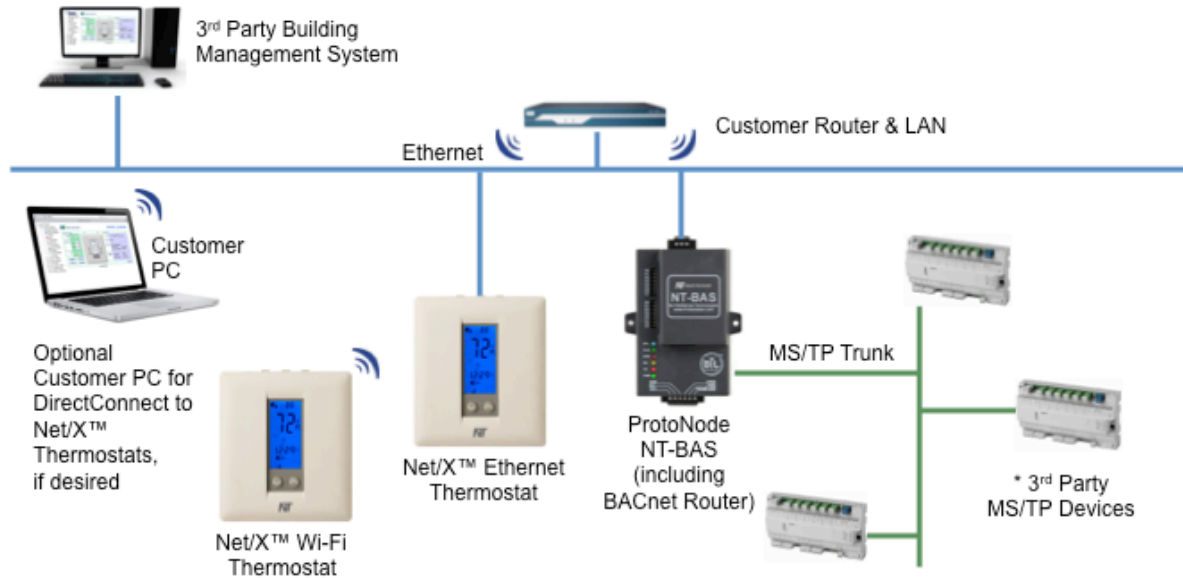
- SPID: 80:00:95:46:00:84:04:07
- Profiles: 0000 - Node object (1)  
0001 - Open Loop Sensor Object (5)  
0003 - Open Loop Actuator Object (5)

## WIRING DIAGRAMS:

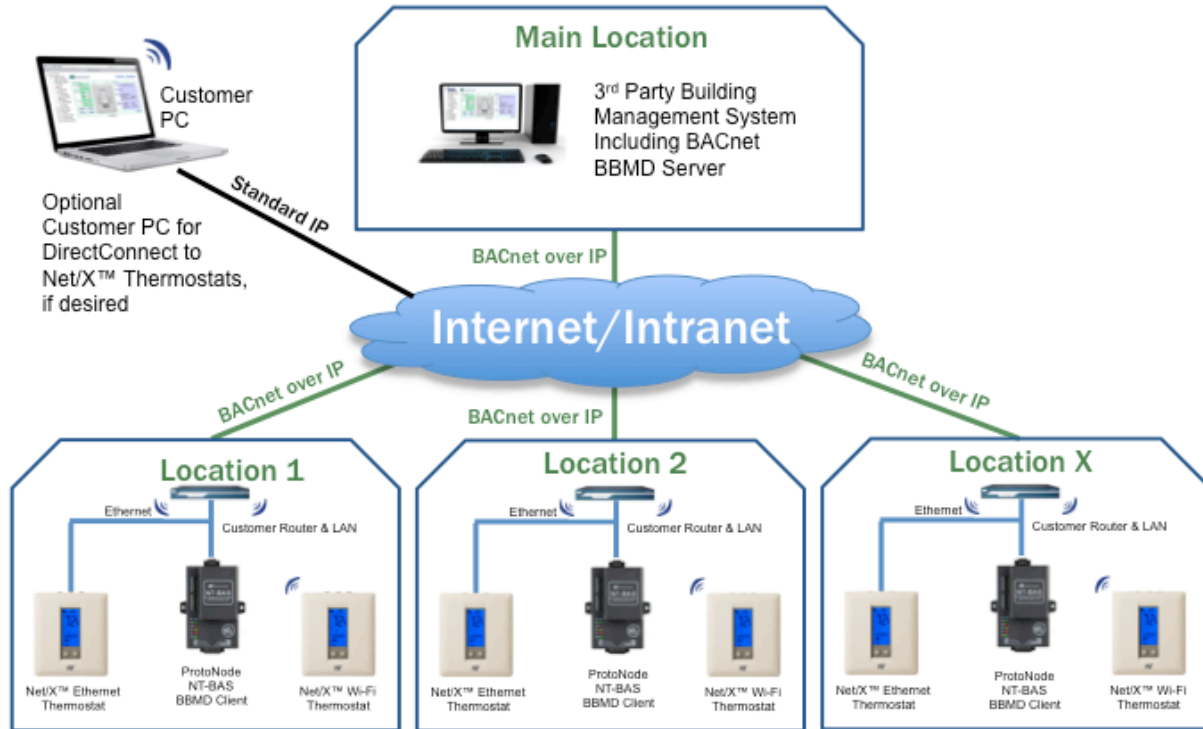
### Local Configuration – Up to 40 Net/X™ Thermostats All Hardware on Same Network & Subnet



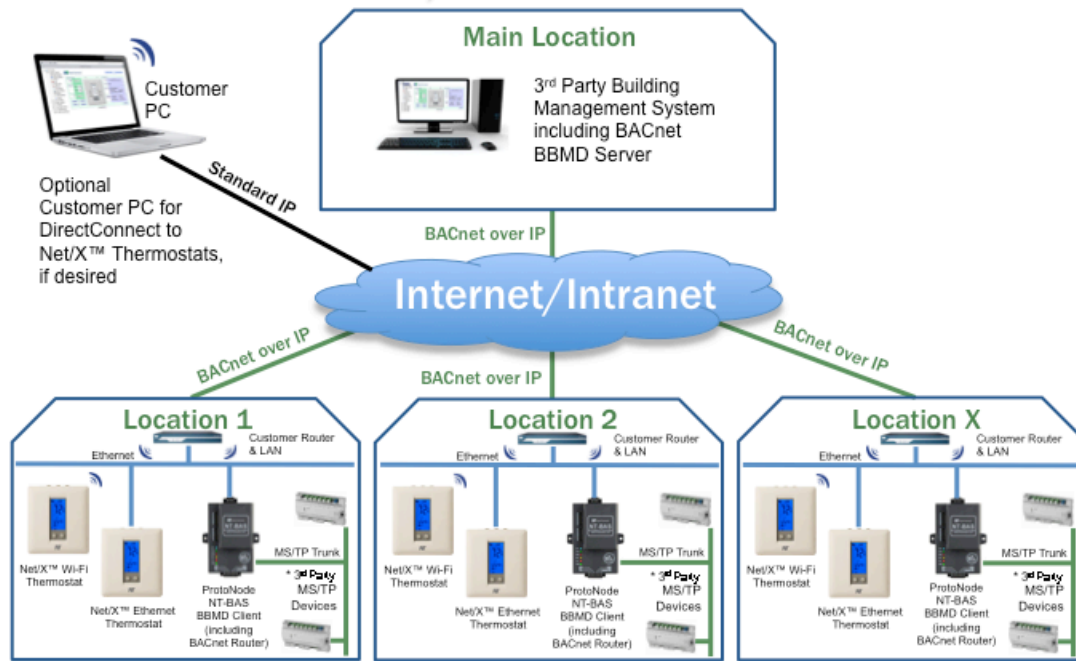
## Local Configuration w/Additional BACnet Devices Up to 40 Net/X™ Thermostats All Hardware on Same Network & Subnet



## Remote Configuration – Up to 40 Net/X™ Thermostats BMS at Main Site, NT-BAS on Site at Each Location



## Remote Configuration w/Additional BACnet Devices Up to 40 Net/X™ Thermostats BMS at Main Site, NT-BAS on Site at Each Location



## Remote Configuration Up to 40 Net/X™ Thermostats BMS & NT-BAS at Main Site, NetX™ Thermostats at Remote Sites

