Overview

The ProtoNode for Square D is an external, high performance, low cost, **Building Automation multi-protocol gateway** preprogrammed for Square D's Meters to instantly support Modbus RTU to BACnet MS/TP, BACnet/IP, Metasys N2 and LonWorks.

The ProtoNode has configurations which are pre-programmed and tested by Square D. These configurations are stored within memory and selectable via Web Configurator for each of the following meters to support BACnet, Metasys N2 or LonWorks: PM800 (Series), PM1000, DM6000, I6200, I6200M, CM4000, I7550/I7650, I8600, PM20, PM700, MicroA, MicroE, MicroH, MicroP, Enercept, EnrgMtr, E5600, EM3550, EM3555, PM5000, I7300, PM8000, Compact NSX, PM600, and CM2000.

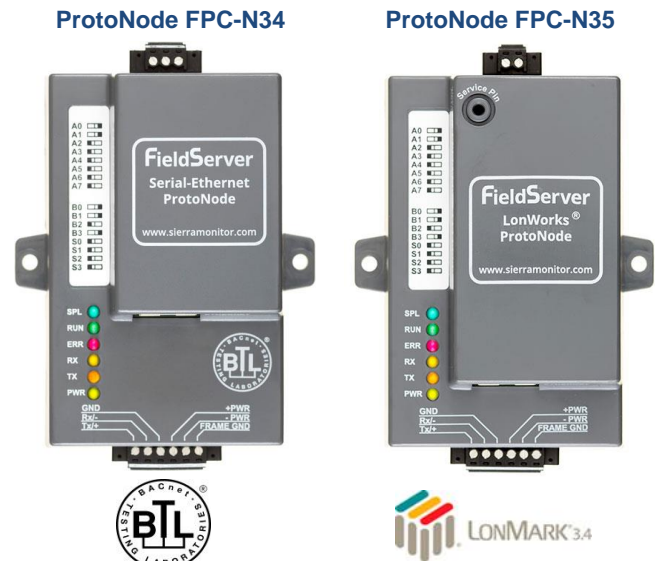**ProtoNode FPC-N34**   **ProtoNode FPC-N35**

The ProtoNode FPC-N34 and FPC-N35 (LonWorks) have been designed for easy field installation. DIP switches are used to set to Auto-Discover meters via serial connection and automatically load the profile on power up. Other setting (baud rate Node-ID, MAC Address) can be set on the DIP switches. Thus, the user simply sets the DIP switches, connects the cables, and applies power to install the unit.

Three ProtoNodes are available that fulfill the Square D configurations:

- FPC-N34-0504 – BACnet IP/BACnet MSTP
- FPC-N34-0505 – Metasys N2
- FPC-N35-0503 – Lonworks

ProtoNode Features and Benefits

- All configurations are Square D tested and approved.
- Configurations are pre-loaded and into each unit so they work with the meters instantly.
- Mapping Modbus registers to BACnet, Metasys N2 or LonWorks is not necessary. *Saves time on installation.*
- Set the DIP switches, connect the cable, and turn the power on. *Plug and play installation.*
- BACnet Testing Labs BTL marked for the ProtoNode FPC-N34 and LonMark Certified for the ProtoNode FPC-N35. *Best of Breed.*
- Can support multiple meters and other protocols on one ProtoNode, but must be configured by Square D.

ProtoNode	Interface Connections			Point Count			Certifications	
	RS-485	Ethernet	LonWorks	Level I	Level II	Level III	BTL	LonMark
FPC-N34	2	1		1500	5000	10000	Yes	
FPC-N35	1	1	1	1500	4096	n/a	Yes	Yes

Specifications

Power Requirements
Power: 9-30V DC or 12-24V AC
(RS-422 = 15-30V DC or 12-24V AC)
Current Draw:
FPC-N34 @ 12V = 240 mA
FPC-N35 @ 12V = 250 mA

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

Enclosure
Dimensions (HxWxD):
4.5 x 3.2 x 1.6 in.
(11.5 x 8.2 x 4.0 cm)

BACnet Support
- Alarm & Event notification read properties multiples
- BACnet COV's, Trend Logging, BBMD and optional BACnet Router support
- Support up to 10,000 BACnet Objects
- DIP switches are for setting MAC Address, Node-ID, Baud Rate on the RS-485 Field protocol

Warranty
2 years

Approvals
BACnet Testing Labs (BTL) B-ASC Ver. 12
LonMark 3.4 Certified - ProtoNode Series
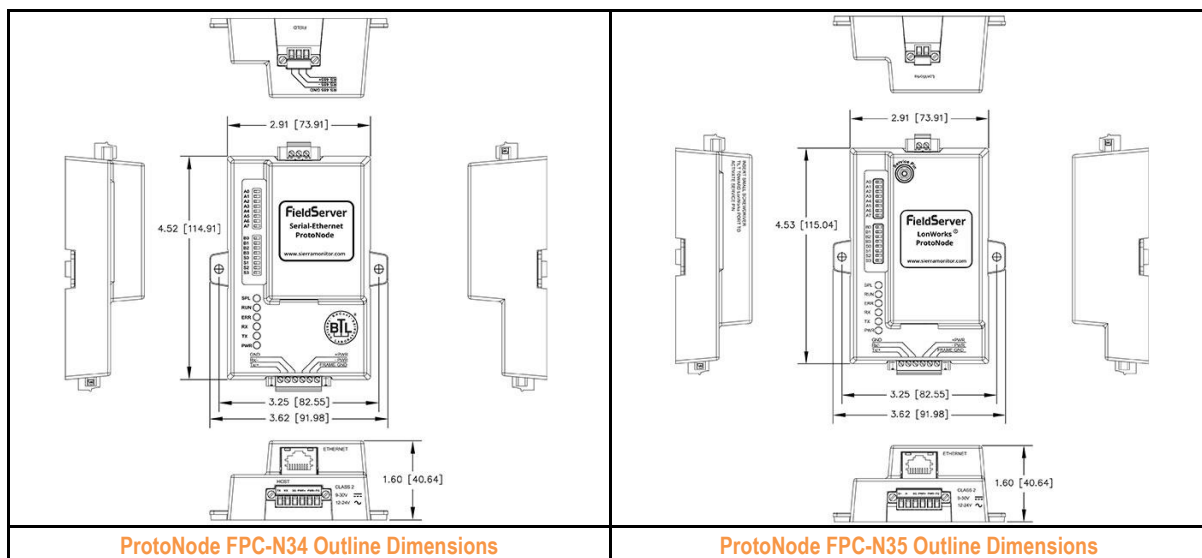**TUV Approved** to UL 916 EN 60950-1
EN 50491-3 and CSA C22-2 standards
RoHS Compliant

CE & FCC Approved

***Specifications subject to change without notice**

ProtoNode FPC-N34 Outline Dimensions

ProtoNode FPC-N35 Outline Dimensions

LonWorks® is a registered trademark of Echelon Corp.
BACnet® is a registered trademark of ASHRAE.

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