Overview

Sierra Monitor pre-programs the ProtoNode solution to provide a virtual plug-and-play, easy, complete protocol package for the OEM including: BACnet MS/TP, BACnet/IP, Metasys N2 by JCI, Modbus TCP/IP, KNX, M-Bus, EtherNet/IP, LonWorks and many others. 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. ProtoNode OEM users have access to the extensive FieldServer driver library.

ProtoNode is the instant answer to a manufacturer's needs to meet customer demands. As an example, a manufacturer might have five different devices, each requiring a variety of protocols to meet their customer's interoperability needs. They desire a single source solution, with multiprotocol, multi-configuration capability, and they need it now! A single ProtoNode Solution can be provided by FieldServer that has all pretested configuration choices preloaded.
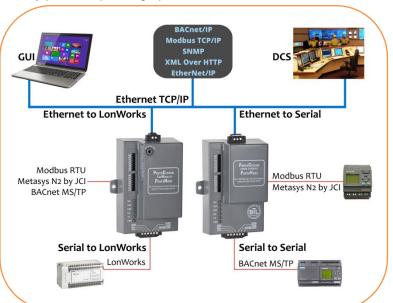
ProtoNode FPC-N34

ProtoNode FPC-N35

ProtoNode Selection

- Ability to automatically support multiple known controller profiles.
- Designed to be full featured, field programmable, and with multiple protocol support for any protocol translation between Serial, Ethernet, LonWorks, KNX or M-Bus environments.
- Three methods of configuration: 1. Configuration Auto-Selector (via DIP switches)
                                    2. Auto-Discover known devices
                                    3. Profile selection via Web Configurator to load multiple configurations
- Support one or multiple field protocols in single ProtoNode.
- Supports up to 10,000 Host and Field Protocol memory points depending upon model selected.
- Has the ability to simultaneously be a Gateway and a BACnet MS/TP to BACnet/IP Router (additional charge).
- BACnet COV support provides fast data communication while reducing the traffic over a BACnet network.
- BACnet BBMD Server support for connecting to remote BACnet networks.
- Supports virtual nodes allowing multiple OEM controllers to connect to a single ProtoNode and seen as separate controllers on the various field networks.
- Easily supports OEM's custom proprietary host serial or Ethernet protocols.
- Multi-Client and Multi-Server support ensures interoperability between any Industrial and or Building Automation protocols.
- BTL Marked and LonMark Certified.

ProtoNode	Interface Connections							Point Count			Certifications		
	RS-232	RS-485	RS-422	Ethernet	LonWorks	KNX	M-Bus	Level I	Level II	Level III	BTL	LonMark	KNX
FPC-N34		2		1				1500	5000	10000	Yes		
FPC-N35		1		1	1			1500	4096	n/a	Yes	Yes	
FPC-N36		1	1	1				1500	5000	10000	Yes		
FPC-N37			1	1	1			1500	4096	n/a	Yes	Yes	
FPC-N38	1	1		1				1500	5000	10000	Yes		
FPC-N39	1			1	1			1500	4096	n/a	Yes	Yes	
FPC-N40		1		1		1		1500	5000	10000	Yes		Pending
FPC-N41				1	1	1		1500	4096	n/a	Yes	Yes	Pending
FPC-N42		1		1			1	1500	5000	10000	Yes		
FPC-N43				1	1		1	1500	4096	n/a	Yes	Yes	

Specifications

Power Requirements
Power: 9-30 VDC or 12-24 VAC
(RS-422 = 15-30 VDC or 12-24 VAC)

Current draw:
FPC-N34 @ 12V = 240 mA
FPC-N35 @ 12V = 250 mA
FPC-N36 @ 15V = 200 mA
FPC-N37 @ 15V = 210 mA

M-Bus:
Slave: 550 mA @ 12V
Master (1 Slave): 580 mA @ 12V
Master (64 Slave): 980 mA @ 12V

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

LonMark Certification on the ProtoNode LER
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)

Warranty
2 years

Approvals
BACnet Testing Labs (BTL) B-ASC Ver. 12
LonMark 3.4 Certified - ProtoNode LER Series
TUV Approved to UL 916 EN 60950-1
EN 50491-3 and CSA C22-2 standards
RoHS Compliant
DNP3 Conformance Tested
CE & FCC Approved

*Specifications subject to change without notice

ProtoNode Non-LonWorks Outline Dimensions

ProtoNode LonWorks Outline Dimensions

6/15