

*ProtoNode is an external **Building and Industrial Automation multi-protocol device server** for OEMs wanting to provide protocol translation between Serial-Serial, Serial-Ethernet and Ethernet-Ethernet devices.*

The ProtoNode is designed to be used by OEM customers who need to quickly and easily enable their new or legacy devices to interface with other protocols. The extensive FieldServer driver library, coupled with the FieldServer experience in protocol translation gateways provides the OEM customer with confidence that their products will meet the foreign networks requirements for interfacing.

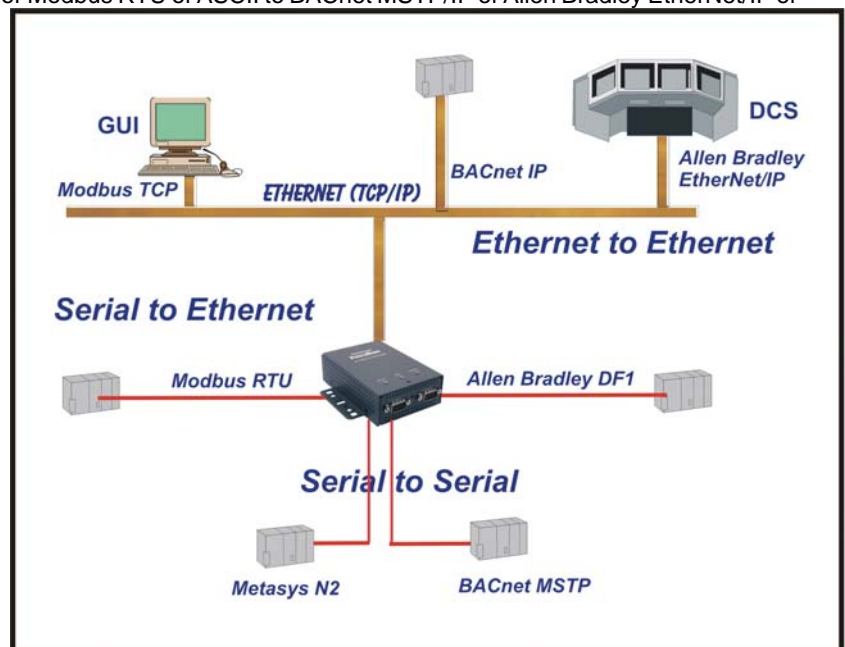
ProtoNode provides the greatest flexibility and versatility available today. It supports virtual nodes which allows multiple OEM controllers to connect to a single ProtoNode and seen as separate controllers on the various field networks.



ProtoNode includes all the hardware and software to enable the customer's products to interface to various networks. It includes two serial and one Ethernet port. Each ProtoNode is provided with the necessary protocol drivers. Multiple drivers can be installed on a single ProtoNode. FieldServer can provide custom driver support when needed.

## Features/Benefits

- ✓ The most flexible and versatile multi-protocol Device Server on the market.
- ✓ Supports virtual nodes allowing multiple OEM controllers to connect to a single ProtoNode and seen as separate controllers on the various field networks.
- ✓ TRUE protocol translation and not Protocol packet Encapsulation.
- ✓ Interfaces to over 85 Building and Industrial Automation Protocols.
- ✓ Bridges between Allen Bradley DF1 or Modbus RTU or ASCII to BACnet MSTP/IP or Allen Bradley EtherNet/IP or Allen Bradley CSP.
- ✓ Translates between Ethernet to Ethernet Protocols i.e. Modbus TCP to Allen Bradley EtherNet/IP devices.
- ✓ Two RS-232/422/485 software selectable serial ports enable Serial to Serial protocol translation for bridging legacy devices to Industrial Automation or Building Automation networks.
- ✓ Can easily support OEM's custom host serial or Ethernet protocols.
- ✓ Multi-Client and Multi-Server support ensures interoperability between any Industrial and or Building Automation protocols.
- ✓ Flash upgradeable.
- ✓ RoHS compliant
- ✓ Din Rail Mount optional



## Specifications

### Communications Interface

Serial Interface	Two ports that can be configured as either RS-232 or software RS-485 Independent port configuration of baud rates, data bits, stop bits and parity
Connectors	RS-232/422/485: DB-9 connector, up to 115.2 Kbps

### Ethernet Interface

LAN Interface	10/100BaseT Ethernet (auto-sensing)
Connectors	LAN: RJ-45 connector

### Operating

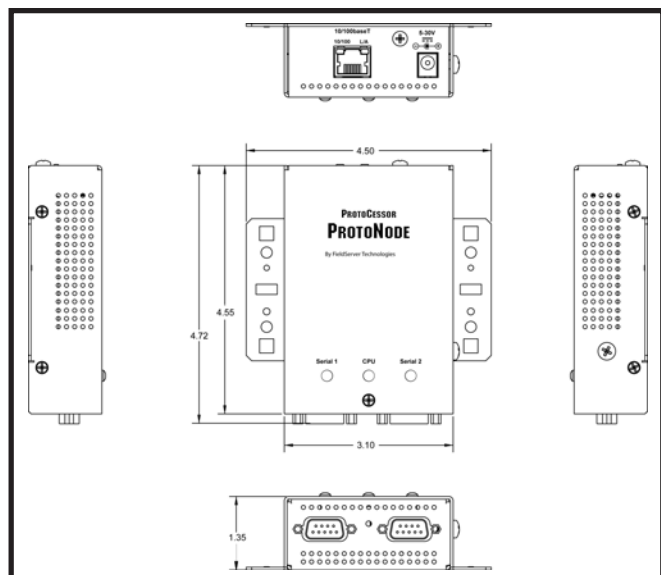
Processor Memory:	32 bit ColdFire CPU features 4 MB flash, 16 MB SDRAM, 66 MHz
Power Requirements:	5 VDC to 30 VDC
Opt.Power Supply:	110V-230V Switchable power supply that will plug into the DC screw block connector
LEDs	Diagnostics
Configuration:	Software configurable

### Environmental

Operating Temp.:	-40°F to 187°F (-40°C to 85°C)
Relative Humidity:	5-90% RH, non-condensing

### Enclosure

Dimensions:	4.55 x 4.50 x 1.35 inches (L x W x H) (11.56 x 11.68 x 3.43 cm)
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**Mounting Dimensions**

### Approvals

Regulatory Approvals: FCC Class A, Part 15, ICES-003 EN 55022, EN 55024  
CE (EN 55022, EN 55024)  
UL916

Surge Suppression: EN61000-4-2 ESD EN61000-4-3 EMC  
EN61000-4-4 EFT

### Warranty

Warranty: Two years



### Supported host side protocols:

#### RS-232 or RS-485 connection to OEM's device:

- ◆ Modbus RTU
- ◆ Allen Bradley DF1
- ◆ BACnet MSTP
- ◆ Metasys N2
- ◆ ProtoCessor Simple Protocol (PSP Driver - see [www.ProtoCessor.com](http://www.ProtoCessor.com) for the spec on the driver).
- ◆ Any OEM's custom serial protocol

#### Ethernet (10/100Base-T) to the OEM's device:

- ◆ Allen Bradley EtherNet/IP
- ◆ BACnet IP
- ◆ BACnet Ethernet
- ◆ Modbus TCP/IP
- ◆ OEM's custom Ethernet protocol

### Supported field protocols: Automation Protocols

#### Serial (RS-232 or RS-485):

- ◆ Allen Bradley DF1
- ◆ BACnet MSTP
- ◆ Modbus RTU/Modbus ASCII
- ◆ Metasys N2
- ◆ DNP 3.0
- ◆ TL1
- ◆ Telnet
- ◆ And others-See [www.ProtoCessor.com](http://www.ProtoCessor.com)

#### Ethernet (10/100BaseT)

- ◆ Allen Bradley CSP
- ◆ Allen Bradley EtherNet/IP
- ◆ BACnet Ethernet
- ◆ BACnet IP
- ◆ GE-EGD
- ◆ GE-SRTP
- ◆ Modbus TCP
- ◆ OPC
- ◆ SNMP

ProtoNodes are also available with LonWorks and RS-485