ProtoCessor
ProtoCarrier - FFP and ASP

A Sierra Monitor Company

*ProtoCarrier is a family of daughter cards that enable OEMs to rapidly add **Building and Industrial Automation protocol translation** support to new and legacy devices, without the time and expense of redesigning their hardware. We support protocol translation between devices and networks using Serial, Ethernet, General Purpose I/O (Digital & Analog) or LonWorks.*

FieldServer Technologies pre-programs the ProtoCarrier solution to provide the easiest, complete Industrial or Building Automation protocol support for the OEM including: BACnet MS/TP, BACnet IP, Metasys N2, Modbus TCP, Allen Bradley EtherNet/IP, LonWorks and many others. Each configuration is virtually plug-and-play for each of the protocols. *These proven solutions have been designed for ease of installation and support by the OEM and their customers.*

There are 2 families of ProtoCarrier's:

ProtoCarrier-FFP:

- *Designed to be full featured, field programmable, and with multiple protocol support. They support any protocol translation between Serial, Ethernet, or LonWorks environments.*

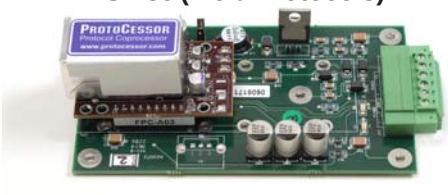
ProtoCarrier-ASP:

- *Designed for OEM's with cost sensitive requirements but need various RS-485 protocols like BACnet MS/TP, Metasys N2, Modbus RTU, and others.*
- *Developed for OEM's who cannot redesign their hardware but have an existing RS-232 or RS-485 Interface.*
- *Supports Serial to Serial protocol translation and/or General Purpose I/O to various RS-485 protocols like BACnet MSTP.*
- *OEM devices that support any FieldServer Host serial protocol can use the ProtoCarrier ASP to convert the output to any supported Field RS-485 protocols (i.e Modbus RTU to BACnet MS/TP).*
- *If the OEM does not have any supported Host serial protocols, the ProtoCessor Simple Protocol (PSP – ASCII) can be implemented..*
- *For a small fee, FieldServer can also implement any OEM's propriety serial protocol on the Host serial port of the ProtoCarrier ASP.*

ProtoCarrier-FFP RS-485 (Host) to RS-485/Ethernet (Field)

ProtoCarrier-FFP RS-232/Ethernet (Host) to LonWorks (Field)

ProtoCarrier-FFP Ethernet to RS-485 (Field Protocols)



ProtoCarrier-ASP RS-485 (Host) to RS-485 (Field Protocols)

FieldServer Technologies, 1991 Tarob Court, Milpitas, California 95035 USA **Web:** www.protocessor.com
Tel: 408-262-2299, **FAX:** 408-262-9042, **Toll-Free**: 800-317-8319 **Email:** sales@protocessor.com

Features/Benefits

- ✓ The most flexible and versatile multiprotocol bridging product on the market.
- ✓ Add new protocol capability easily to new and existing products with minimal engineering resources.
- ✓ Increase OEM sales in new markets with ProtoCarrier family of products.
- ✓ TRUE protocol translation and not Protocol packet Encapsulation.
- ✓ Interfaces to over 80 Building and Industrial Automation Protocols.
- ✓ Bridges to Modbus RTU, BACnet MS/TP, BACnet/IP, Modbus TCP, Allen Bradley EtherNet/IP, Metasys N2, LonWorks and more.
- ✓ Multi-Client and Multi-Server support ensures Interoperability between any Industrial and or Building Automation protocols.

Specifications

Supported Electrical Connections

Connection to OEM Product

ProtoCarrier-FFP (any combination):

- 1 RS-485 - Phoenix 6 pin Connector
  - RS-485 +/- Frame Ground
    Power +/- Frame Ground
- 1 RS-485 - 3 pin connector RS-485 Phoenix (RS-485 +/- Frame Ground) or 1 RS-232 DB9 serial port.
- 1 Ethernet -10/100 Ethernet port

ProtoCarrier-LON (any combination):

- 1 RS-485 - Phoenix 6 pin Connector or 1 RS-232 DB9 serial port.
- 1 Ethernet -10/100 Ethernet port
- 1 FTT-10 LonWorks port

ProtoCarrier-ASP:

- 1 RS-485 - Phoenix 6 pin Connector or 1 RS-232 DB9 serial port.
- 1 RS-485 - 3 pin connector RS-485 Phoenix.
- 12 General Purpose I/O via Expansion connector (SAMTEC).
  - FFSD-10-S-10.00-01-N (Single Ended Ribbon)
  - FFSD-10-D-10.00-01-N (Double Ended Ribbon)

Power Requirements

Power :	9-30 VDC or VAC or 5 VDC

Mounting

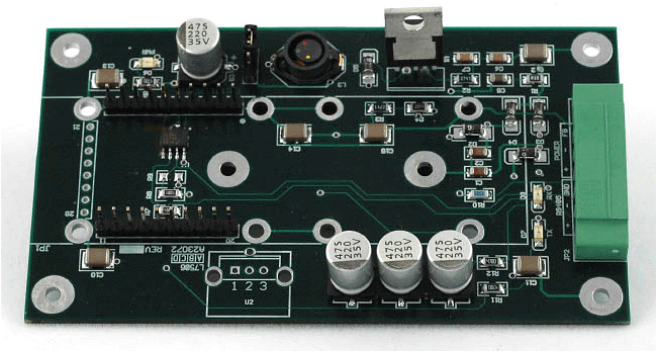
Dimensions:	1.2 x 2.2 x 4.2 inches (HxWxL) 3.05 X 5.60 X 10.67 cm
Mounting holes	Six (6) mounting holes for easy placement)

Warranty

Warranty: Two years

ProtoCarrier Mechanical Drawing

(All mounting holes on the board are made to fit a UNC 4-40 sized bolt)



When using a ProtoCessor with ProtoCarrier, it is necessary to order both the ProtoCarrier and the ProtoCessor:

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