



RLE TECHNOLOGIES PROTOCOL CONVERTER RAPTOR PROTOCOL CONVERTER



DESCRIPTION

The **RLE Raptor Protocol Converter** connects directly to equipment and converts the SNMP, BACnet, and Modbus protocols to one or more of these same protocols for integration into a building management system (BMS) or network management system (NMS). The **Protocol Converter** is ideal for situations where data from monitored equipment is incompatible with the protocols used by the BMS or NMS, such as in cases where legacy monitoring systems are present. The ability of the **Protocol Converter** to accept up to 1,024 inputs over 32 modules means flexible integration with multiple alarm and management systems with the use of one simple device. In addition, the Dual Port Protocol Converter provides a cost-effective means to connect to multiple trunk lines with two additional Modbus EIA-485 ports.



FDS-PC



FDS-PC-DP



FEATURES

- **Multiple input and output protocols**
- **Monitor up to 1,024 Modbus registers, OIDs, or instances**
- **Connect up to 32 units/modules/nodes**
- **Connect to multiple trunk lines with Dual Port Protocol Converter**
- **Alarm notification through email, SNMP**
- **Web configuration**

SPECIFICATIONS

Supply Voltage	24 VAC/VDC @ 600mA max, 50/60 Hz	Security Login	
Communication Ports		Web Browser Access (Ethernet)	1 Web password Read Only; 1 Web password Read/Write
Ethernet	10/100BaseT, RJ45 connector; 500VAC RMS isolation	Terminal Emulation Access	None
EIA-232	DB9 female connector; 9600 baud; No parity, 8 data bits, 1 stop bit	Protocols In	SNMP, Modbus EIA-485, Modbus TCP/IP, BACnet/IP
EIA-485	1200, 2400, 9600 or 19200 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit	Protocols Out	SNMP, Modbus EIA-485, Modbus TCP/IP, BACnet/IP; BACnet MS/TP (Port 3 of Dual Port Protocol Converter only)
Protocol		Max Number of Units/Modules/Nodes	32
TCP/IP; HTML, TFTP	V2C MIB-2 compliant; NMS Manageable with Get	Max Number of Registers/OIDs/Instances	1024
SNMPV1:	Modbus Master/Slave; RTU mode; Supports Master codes 01, 02, 03, 04; Slave code 03	Operating Temperature	32° to 122°F (0° to 50°C)
Modbus (EIA-485)	Modbus Master/Slave; TCP/IP transmission protocol	Operating Humidity	5-95% RH non-condensing
Modbus TCP/IP	ASHRAE STD 135-2004 Annex J; Port 3 on Dual Port Protocol Converter is BACnet MS/TP capable (Slave only)	Mounting	Desktop or rack mount (brackets included)
BACNet/IP	Supports Client Authentication (plain and login); compatible with ESMTP Servers	Dimensions	9.8"W x 5.3"D x 1.8"H (248 x 135 x 46 mm)
SMTP (email)	VT100 compatible (for configuration and diagnostics only)	Weight	2.32 lb. (1.05Kg)
Terminal Emulation (EIA-232)		Approvals	CE; ETL listed: conforms to UL 61010-1, EN 61010-1; certified to CSA C22.2 NO. 61010-1; RoHS compliant
Indicator		Warranty	1 year
Network	1 Green/Red LED: Link/No Link; 1 Green Active (additional LEDs for Dual Port Protocol Converter)		
EIA-485 Status	2 Green Transmit and Receive LEDs (additional LEDs for Dual Port Protocol Converter)		



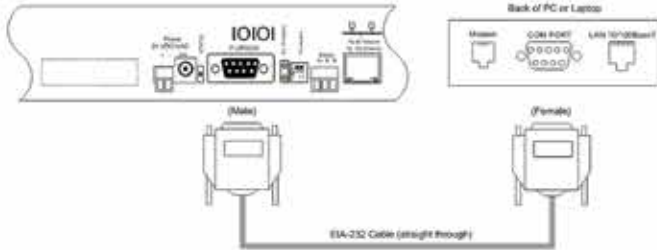
NETWORK

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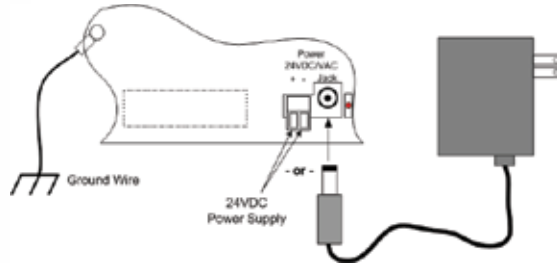
WIRING

EIA-232 COM Connection

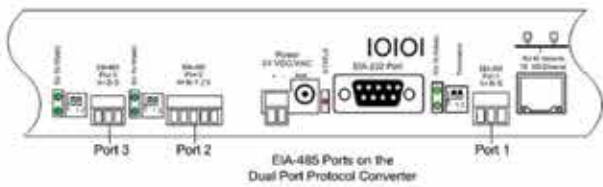
Connect the straight through, 9-pin, serial cable:



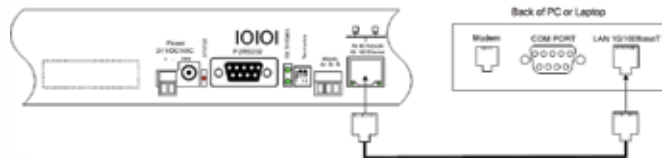
Power Supply and Ground Connections



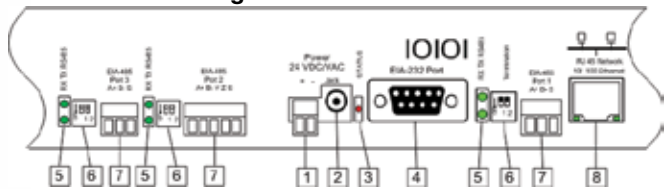
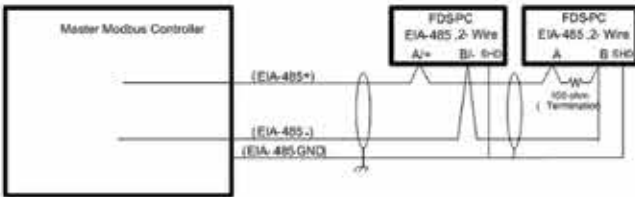
Modbus EIA-485 Connections



RJ45 Ethernet Connection



Terminal Block Designation



Terminal Block Designation

Item No.	Item	Description
1	Power 24 VDC/VAC	Power Terminal Block
2	Jack	Power connector for wall wart adapter
3	Status	Status LED
4	EIA-232 Port	DB9 Female connector
5	RX TX EIA-485 LED	Receive/Transmit status LED. Dual Port Protocol Converter contains two additional sets of LEDs.
6	EIA-485 Termination Switch	Dual Port Protocol Converter contains two additional sets of switches; EIA-485 Port 2, the 5-pin port, can be configured as a 2-wire (half-duplex) or 4-wire (full-duplex) connection. Ports 1 and 3: Switch 1 - unused; Switch 2 - On = 100 Ohm termination Port 2: Switch 1 - Duplex (On = 4-wire; Off = 2-wire); Switch 2 - On = 100 Ohm termination
7	EIA-485 Port	Dual Port Protocol Converter contains two additional EIA-485 ports. Port 2 (the middle port) can be configured as a 2-wire or 4-wire connection. In addition to all other supported protocols, Port 3 (the left most port) of the Dual Port Protocol Converter is BACnet MS/TP capable (Slave only).
8	RJ45 Ethernet Port	10/100 BaseT connector

ORDERING INFORMATION

MODEL
FDS-PC
FDS-PC-DP

DESCRIPTION

Protocol converter for BMS and NMS integration, Single port
Protocol converter for BMS and NMS integration, Dual port