



**Rear of the 48 VDC version**



**Front of EST-9600**

## FEATURES

- **Industrial rated -40 to +70 C**
- **Option for RS530/V.35 port**
- **Ethernet port: 10/100BaseT**
- **Encapsulates HDLC protocols over ethernet networks**
- **Point-to-point or point-to-multi-point for serial synchronous polling applications**
- **AES 128-bit encrypted or non-encrypted payload**
- **UDP transport for non-interference with HDLC error correction functions**
- **Synchronous serial RS232 port**
- **Option for RS530/V.35 port**
- **Internal or external sync clock**
- **Speeds to 2.048 Mbps**
- **Supports up to 20 drops**
- **Backup host option**
- **Easy to setup and maintain**
- **Web browser, telnet or serial configuration**
- **Statistics, logging and diagnostic tools**
- **Can authenticate with RADIUS server**
- **Stand-alone or rack mounting**
- **120, 220 VAC, 12, 24, 48 and 125 VDC options**

## DESCRIPTION

The EST-9600 is a serial server that allows multidrop devices to use Ethernet LANs, unencrypted or with 128-bit AES encryption. The EST-9600 connects any HDLC based synchronous protocol serial device through a LAN and between LANs via routers. The EST-9600 is designed specifically to support synchronous polling protocols that are HDLC based. These protocols include SDLC, BDLC, X.25, Frame Relay, synchronous PPP protocol, etc. These protocols are often error corrected, and the EST-9600 allows these protocols to work through routed local and wide area LANs. The EST-9600 uses UDP protocol to deliver the HDLC traffic, allowing the necessary data connection over a local LAN and across routed networks. The EST-9600 functions independently of the device protocol, allowing HDLC protocols to be carried with no configuration changes.

An EST-9600 host authenticates with remote drop EST-9600s to allow serial synchronous HDLC data connections. Remote drop EST-9600s can authenticate with both a primary host and a backup host. This feature makes it easy to have redundant host sites that will always receive the same poll responses as the master host site. If the objective is to have a backup host site or have a second site that always monitors the RTU responses, the EST-9600 makes it simple and easy to accomplish.

The EST-9600 supports RS232 serial interface speeds up to 230 Kbps, RS530 speeds up to 2.048 Mbps. To deliver HDLC traffic via ethernet in as close to the nature of HDLC as possible, the EST-9600 uses TCP/UDP "best-effort", speedy delivery, rather than the delay and extra overhead that TCP/IP error-correction and flow control could cause. Up to 20 drop EST-9600s may be used with each host EST-9600.

The EST-9600 can be managed through its serial port, via telnet or with a web browser. Remote configuration is supported using TCP/IP (telnet) or any web browser. Security features embedded in the EST-9600 include fine-grained configuration and management controls as well as the ability to turn off remote management functions.

Use the EST-9600 to replace disappearing synchronous paths, or to transport synchronous data via wireless ethernet. Tunnel synchronous data between two-way radios, radar sites, and other critical devices.

# EST-9600 Serial Sync to Ethernet Encrypted Tunnel

## SPECIFICATIONS

### General

1-RS-232 synchronous serial port:

- RJ45 RS232 (per TIA/EIA 561) connector
- Speeds to 230 Kbps
- RS530 or V.35 balanced port option
- Balanced port speeds to 2.048 Mbps)

One ethernet port:

- 10/100BaseT

One asynchronous 9600 baud RS232 port for setup

### HDLC compatibility

- Accepts/Sends any HDLC frames up to 1500 bytes long
- Data Encoded via NRZ or NRZI
- Standard CRC-CCITT as used in HDLC or Sync PPP Internal or External clocks
- Including but not limited to: HDLC, Sync PPP, Frame Relay

### Protocol Features

- IP, DHCP (Client), UDP, ICMP, HTTP, TCP/IP
- Authentication: internal name/password database, or up to two external, customer-supplied RADIUS servers.
- Encryption: 128 bit AES or no encryption
- Once connection is established, tunnels use UDP to deliver packet
- Web browser, telnet, or serial, configuration and management
- Default IP address: 192.168.0.96

### Indicators

Front - Power, Clocking Status, HDLC port activity

Rear – LAN connection, LAN activity

## APPLICATION

Point-to-Point or Multipoint

- Reset
- Software control of access for HTML and telnet setup

### Physical/Electrical

Power: 6VDC, 3 watts, Supplied with 120 VAC external power supply  
12, 24, 48, 125 VDC options are available

5 ¼" x 5 ½" x 1 ¾"

One pound

### Environmental

Operational Temperature: -40° to +70° C

Storage Temperature: -50° to +75° C

Humidity: <95% Non-condensing



**Data Comm for Business, Inc.**

**2949 CR 1000 E**

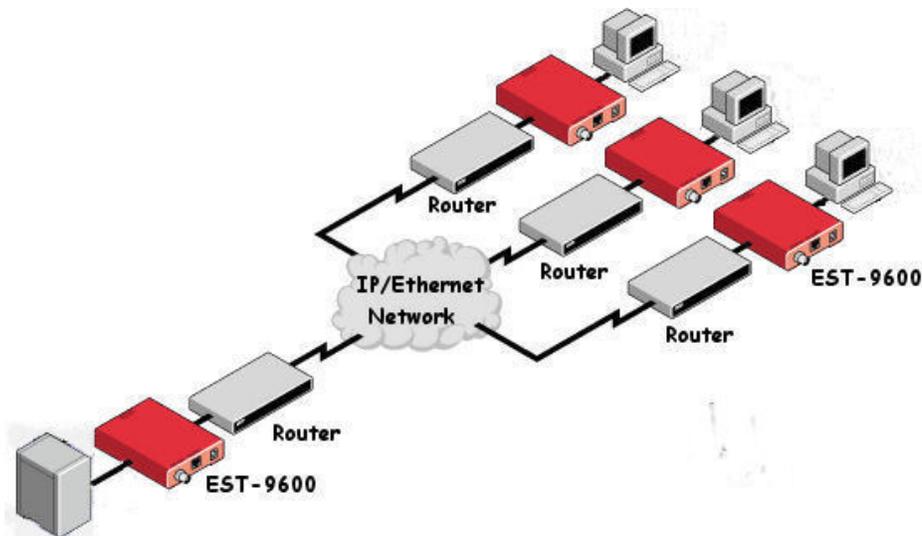
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### Controls

DIP switch:

- Serial Setup enable/disable