



SEL-2890 Ethernet Transceiver Guideform Specification

When connected to a compatible SEL relay the following minimum features shall be available.

Ethernet Connection Ability. The transceiver shall provide an EIA-232 serial-to-10BASE-T Ethernet connection. The Ethernet transceiver shall have a microprocessor and insulate the host Intelligent Electronic Device (IED) or intermediate device from network problems or changes.

IED Telnet Server Communications. A user shall be able to use the Ethernet network and Telnet client software to establish a bi-directional binary communications connection with the connected relay. Through this connection, users shall be able to use command and report dialogues, identically to their use of a direct terminal serial connection to the IED. There shall be a setting to allow the user to disable the Telnet client.

Protocol Stacks. The transceiver shall support communications using Transmission Control Protocol/Internet Protocol (TCP/IP) and User Datagram Protocol/Internet Protocol (UDP/IP).

HTTP Server. The transceiver shall provide a simple Web page server interface that will allow the connected relay serial port to be accessed with standard Internet browser software.

E-mail. The transceiver shall provide a Simple Mail Transport Protocol (SMTP) client that will allow unsolicited messages from the connected relay to be sent via e-mail to a specific e-mail address.

Serial Tunneling. The transceiver shall provide the ability to establish a serial point-to-point tunnel between two devices over an Ethernet network. The following versions of tunneling shall be available.

Commanded Mode. Provides the ability to make and remake serial tunnels dynamically with a command rather than a setting.

Telnet Tunnel. This is a fixed point-to-point serial connection across a network by setting the target IP address and port number.

BTCP Tunnel. This provides the ability to operate multipoint serial network applications over an Ethernet network on the same subnet.

TCP Tunnel. This tunnel is established between two SEL-2890s, then data is transmitted and received, and lastly the connection is terminated.

Telnet disable. This provides a raw mode enabling the SEL-2890 to work with third party OPC servers.

Serial Routing. The transceiver shall be able to compare the first eight bytes of an unsolicited message and compare that information with a user selectable mask. When there is a match, the message is sent to a specific IP address. There is the ability to have up to three different addresses.

