

spTsrv

SCADA Protocol Translator - Terminal Server

4 - 8 - 16 CHANNEL OPTIONS

Applied Systems Engineering, Inc.'s **spTsrv** product is a multi-channel Terminal Server with support for both bit and byte protocols. Along with support for DNP, Modbus, and other async protocols, it is one of the few, if not the only, Terminal Server products that supports legacy protocols such as Conitel and CDC. With a host interface employing the industry standard TCP/IP Internet Protocol Suite, the spTsrv can be used with user application software on a wide range of operating systems including Windows, Unix/Linux, and derivatives.

The spTsrv comes in three form factors supporting 4, 8 and 16 channels. The base unit is 1U height. The 8 and 16-channel units come in a 19" rack-mount metal enclosure and operate on 110/220 VAC. The 4-channel unit is shelf mount with standard power of 5 or 12 VDC. Other power options are available. The enclosure front contains a power LED, operational LEDs, and a serial maintenance port. System information is available through the maintenance ports or via a network connection. The enclosure back contains RJ-45 connectors for Ethernet and serial RS-232 ports. Each serial port includes transmit and receive data LEDs, and supports TxD, RxD, RTS, CTS, DCD, ground, and synchronous clock RS-232 signals.

The spTsrv product is available with three application packages.

1. **SPT:** For operation as a protocol translator or data concentrator with current support for about 40 protocols. Also supports data transfer between masters.
2. **TServ:** For operation as a terminal server interfacing to customer-written master station software. Its biggest advantage in this form is support for older legacy protocols.
3. **Bridge:** For operation as a network bridge, the more conventional terminal server usage. Inserting units at master and remote sites convert serial to network communication and back again without any changes at the master or remote sites. A single host utility can configure all devices on the network. RTU's can be located with communication optimized to their location even when the device is moved to a different channel.

Note: SPT Software for Microsoft window™ is also available (see our SPT-PC solution)



Sample usages:

- Protocol Translator to convert between different bit or byte protocols
- Multi-host a remote device using the same or different protocols
- Data concentrator
- System load testing; replicate one device to 100's to introduce a load for testing a new master
- Passive master point check to listen to communication of an existing master/RTU network, extract data, and forward that data as simulated RTUs to a new master
- Replace old serial and leased line communication with networks

Also, all of them have the ability to interact remotely with an ASE2000. ASE2000 version 2, release 16 or later can connect to a spTsrv unit and present communication data at any remote location just as if it were at the spTsrv site.

FIELD PROVEN SOLUTIONS

The spTsrv supports a wide range of protocols, with software currently operational in hundreds of locations around the world. The proven hardware design of serial (bit and byte) communication in many of ASE's products has been redeployed as an integral part of the spTsrv.

SPTSRV FEATURES

Area	Feature	Description
Communication	Serial	Standard spTsrV hardware is available in four, eight and sixteen channel configurations. Serial communication is RS232 over eight wire RJ45 connectors.
	Speed	Up to 57,600 baud for byte and 2,400 baud for bit
	Network	10/100 Base-T Ethernet ports
	Maintenance	One serial diagnostic port per card
Software	Serial communication	Bit, byte, and HDLC, selectable by channel
	Support Utility	Windows-based program to view real time configuration, communication, and statistic information, and to support field upgrades
Hardware	Power	Various options based on requirements. Contact ASE for options
	Temperature	0 ° to 70 °C operating, -20 ° to 70 °C storage
	Surge Withstand	RS-232: ±10kV; Network: 2000V Vrms
	Activity LEDs	RS-232 transmit and receive data LEDs, one set per channel, Ethernet activity and 10/100 LEDs, Power indicators

