

TROY500 and TROY505

Serial Device Servers for Ethernet and Wireless Connectivity



Wireless and Connectivity Solutions

Serial Connectivity for M2M or SCADA Applications



Flexible

The TROY500 and TROY505 serial server family allows sharing serial devices on traditional or wireless networks. The TROY500 series offer software controllable RS-232, RS-422, or RS-485 serial modes, while TROY505 series adds the MODBUS protocol used in industrial applications. Both models can be ordered with a wireless option that provides 802.11b LAN connectivity in addition to the Ethernet. The provided Serial Port Emulator software allows for an easy integration with existing PC applications. Power can be applied through the provided power adapter or through the Pin9 of the serial connector.

Secure

The TROY500 serial servers include enterprise-level security features including access control lists, complete protocol and application enable/disable control, read and write configuration passwords, and SNMP community name configuration. The wireless models also add 802.1x Extensible Authentication Protocol (EAP) with Tunneled Transport Layer Security (TTLS) or Lightweight Extensible Authentication Protocol (LEAP); Protected Extensible Authentication Protocol (PEAP); Open System or Shared Key support with Wired Equivalent Privacy (WEP) encoding; WPA (Wi-Fi Protected Access) Personal (WPA-PSK) and Enterprise modes, which utilize improved encryption via the Temporal Key Integrity Protocol (TKIP); and WPA2, which adds Advanced Encryption Standard (AES).

Rugged

The enclosure is made of rugged 18 gauge pre-plated galvanized steel with an IP40 industrial-grade rating. Side flange mounts allow for permanent installation on virtually any surface, or on a DIN rail using the optional DIN rail mounting bracket. The unit can withstand electrostatic discharges as high as 15 kV at the serial connector.

Easy to Manage

In addition to a built-in web browser interface, TROY provides ExtendView, a Windows utility for easy configuration and management. A console accessible via TELNET or the serial port is available for more sophisticated diagnostics and configuration. The TROY500 and TROY505 series are also compatible with the Simple Network Management Protocol (SNMP) for compatibility with most popular network management systems. The included Serial Port Emulator software allows you to configure virtual serial ports on a Windows system (for example, COM3) that redirect all of the data out to the TROY serial servers on your network allowing you to continue use of your current applications.

Tested for Maximum Compatibility

TROY wireless serial servers have been tested extensively to support the security methods used in leading access points and security servers including Cisco, Symbol, Intermec, Funk Software, and many others.

Warranty

All TROY products include an industry-leading 5-year warranty and free lifetime technical support.

Performance. Security. Quality. TROY sets the standard for wireless and connectivity solutions.

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TROY500 and TROY505 Serial Server Specifications

Mechanical

- Size: 125.73 x 75.11 x 24.08 mm (4.95 x 2.957 x 0.948 inches)

Environmental

- Temperature:
 - Operating Temperature: 0° to 50° C
 - Storage Temperature: -20° to 70° C
 - Maximum temperature change per hour: 20° C
- Relative Humidity:
 - Operating: 10% to 90% non-condensing
 - Storage: 10% to 90% non-condensing
- Altitude:
 - Operating: 3.1 km
 - Storage: 9 km
- Shock: MIL-STD-202F (Method 213B) to 20 G's
- Vibration: MIL-STD-202F (Method 204D) to 7 G's
- Enclosure: IP40 rating

Electrical

- Input power @ +5VDC:
 - 500 mA max for wired
 - 800 mA max for wireless option
- Provided power adapter or through Pin9

Standards Compliance

- RS232, RS422 and RS485 serial interfaces
- MODBUS RTU/ASCII (TROY505 series only)
- 802.11b (wireless version)
- 802.3i (10Base-T) and 802.3u (100Base-TX) Ethernet
- FCC & CE Class B EMC standards
- FCC Part 15 & CE wireless standards
- RFC 2217

Supported Protocols

- 802.11b, ARP, TCP, Telnet, ICMP, SNMP, DHCP, BOOTP, Auto IP, HTTP, SMTP, TFTP, SLP, DNS, Dynamic DNS

Management and Utilities

- Serial Port Emulator software
- TROY web browser interface (includes English, German, French, Italian, Spanish and Dutch multilingual capability)
- Console accessible via serial port or TELNET
- Simple Network Management Protocol (SNMP) MIB I and II; IP
- Firmware downloads via TCP/IP (master mode tftp, slave mode TFTP, or BOOTP); multiple servers may be downloaded simultaneously
- On-line HELP

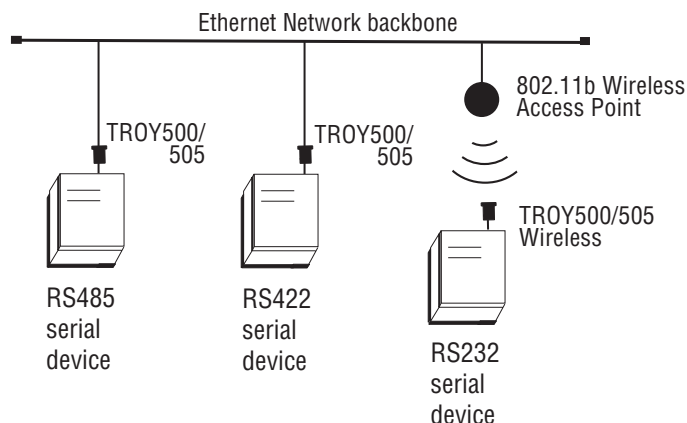
802.11b Wireless (Optional)

- Security: WPA and WPA2 (personal and enterprise modes), PAP, MS-CHAPv2, 802.1x EAP with TTLS/LEAP/PEAP, WEP, read and write configuration passwords, TCP/IP access control lists
- Variable data rates: 11, 5.5, 2 and 1 Mbps
- Frequency band: 2.4 GHz ISM Band
- Output power: 15dBm
- Sensitivity (typ, AWGN, 8E-2 PER): -91dBm at 1Mbps, -88dBm at 2Mbps, -87dBm at 5.5 Mbps, -84dBm at 11 Mbps
- Range: 100 m
- RP-SMA connector with dipole swivel 2dB antenna

Typical End User Applications

- Industrial automation
- Building automation
- Medical devices
- Security access and control
- Point of sale
- LED signs
- Any other M2M or SCADA application utilizing serial connectivity

Configuration



Part# Product Description

Part#	Product Description
TROY500-0031	Wired; US power supply
TROY500-0033	Wired; Universal power supply w/ Euro cord
TROY500-1031	Wireless; US power supply, FCC Wireless Domain
TROY500-1033	Wireless; Universal power supply w/ Euro cord, ETSI Wireless Domain
TROY505-0031	MODBUS Version; Wired; US power supply
TROY505-0033	MODBUS Version; Wired; Universal power supply w/ Euro cord
TROY505-1031	MODBUS Version; Wireless; US power supply, FCC Wireless Domain
TROY505-1033	MODBUS Version; Wireless; Universal power supply w/ Euro cord, ETSI Wireless Domain
136-00044-00	Pair of DIN rail mounting brackets