TS224

Async Port and Terminal Server
RS32 / RS485 230Kbps
SSL Encryption

BENEFITS

Ethernet interface :
Twisted pair 100BaseTX
or fiber optic 100BaseFX ,
 multi mode or single mode

Data encryption
SSL - TLS protocol
Mode: raw-ip, COM-port, Te-lex
Point Of Sales PAD

Secured Client / Server
Embedded Firewall feature

Operating Modes :
Raw ip
RFC.2217 : COM port
Message bloc
Half-duplex modem
ModBus
HNZ
Telnet
Reverse Telnet
RLogin
Telex
Deport of Dry Relay contact

Able to adapt no standard speed on RS232 between 2 ports

Secured Async Port Server TS224

TS224 carries asynchronous data over the Ethernet / tcp-ip network, in fulfilling most industrial requirements especially thanks to its Fiber Optic interface and its RS232 / RS485 user defined terminal interface.

TS224 guaranties the confidentiality of your critical data that flow over the Ethernet / IP network, with an SSL encryption option.

The TS224 offers a choice of mains or DC (9-36 or 36-72 Vdc) power supplies to suit most industrial requirements.   This compact enclosure may also fit in a 19'' bay or on a DIN rail.

The asynchronous ports of the TS224 allows to connect any kind of asynchronous equipments such as : modem, fax, industrial unit (RTU), counters, console ports, payment systems, legacy terminals, etc …

The TS224 is a key equipment in industrial applications thanks to its rich features and its point to point or multipoint RS-485 data interface.

For example, TS224 acts as a MODBUS to IP converter for industrial bus enhancement : the TS224 handles the MODBUS to ip address translation. Modbus can also be transported over IP with TS224's.

TS224 is equipped with either a copper or a fiber optic interface for the LAN connection. The fiber optic interface can be multi mode or single mode with a reach of up to 20 km, to keep data immune to electromagnetic disturbances.

The TS224 offers extra virtual serial COM ports to PC's (e.g. COM3:). Through the Serial-IP software and the RFC-2217 protocol, the PC and its communication software have a full control of the TS224's ports just as its own local COM ports.

The TS224 supports also special modes of operation aimed at providing an easy migration of existing application to IP network. These applications may be MODBUS, half-duplex modem simulation, HNZ, message packet protocols, …

TS224 offers as an option, 2 inputs and 2 dry relay contacts that can be used in remote control by any IP application (AT commands, SNMP TRAP), or as a deport of relay contacts over an IP network.

Managing a TS224 is very easy through an async port or a telnet session with intuitive menus. The secured option can serve an https session to a standard web browser. TS224 may also be managed through the SNMP protocol, and issue TRAP's to an SNMP server. TS224 is provided with a graphical mib for snmp-c software. TS224 configuration is protected by a password.
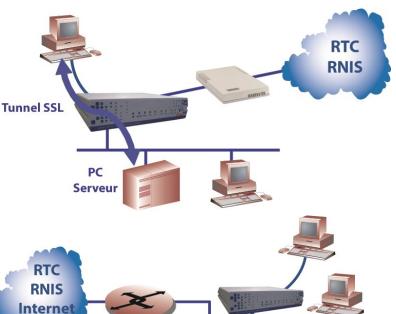
TS224 has a built-in firewall to check for valid IP addresses.

The full range of async port servers is equipped with Flash memories for further firmware upgrade when the customer requirements change.

The **SSL** option provides a secured path between a client and a server on an ip based network. The **TS224** supports all features of authentication and data encryption with the up-to-date and strong algorithms such as AES with a key of 128 or 256 bits. TS-224 can operate with the Serial-IP software that allows such SSL secured communication from a PC / Windows server.

TS224 has two RS232/RS485 ports and helps connecting various applications to the LAN: modem sharing, VT.100 terminals, Payment terminal, RTU, etc

The SSL option guaranties a secured and confidential data transmission over the Ethernet / TCP-IP network thanks to the strong encryption protocols with 128 or 256 bit ciphers.

TS224 is a perfect unit to securely connect RS232/RS485 devices though the LAN or a WAN with IP protocols. The MODBUS mode of operation provides a migration path for such industrial bus to Ethernet. The TS224 connects to MODBUS terminal or network, and performs the MODBUS (RTU or ASCII) to IP address translation.

Description

- Dual async port server, RS232/RS485 to 10 / 100 Base TX Ethernet
- Ethernet: copper pair or fiber optic with a choice of multi or single mode up to 20 km
- Protocols: IP, ICMP, ARP, UDP, TCP, BOOTP, TELNET, Reverse Telnet, RLogin, SNMP, HTTP, ftp.
- SSL Encryption (option): RC4, DES, 3DES, AES 128 et 256 - for raw-ip, RFC2217, Telex, POS PAD
- Special modes: MODBUS (rtu/ascii), HNZ, Telex, message, half-duplex
- Point Of Sale PAD mode with SSL encryption
- Authentication and accounting: Radius
- Embedded Firewall
- Dual V24/RS485 interfaces: 300 to 230,400 BPS, with full V24 signals DTR, CD, RTS, CTS, DSR.
- TELNET RFC2217: virtual COM port with full speed and signal controls.
- Supports Serial IP (TM) software for MS WINDOWS.
- Migration of asynchronous links over an ip network
- 2 digital inputs and 2 dry relay contacts: remote control and relay transport over IP (option)
- Industrial compact and metallic enclosure
- Mains or DC/DC power converter
- 19'' chassis and DIN rail mounting kits available

Technical Specifications

- Ethernet: 802.3, 10/100BaseTX with RJ45 socket, or 100BaseFX with SC socket.
- Protocols: IP, ICMP, ARP, TCP, BOOTP, TELNET, RLogin, FTP, HTTP, SNMP, MODBUS, HNZ, Telex, rfc.2217, SSL + https (option): RC4, DES, 3DES, AES, RSA, SHA
- Radius : authentication
- Administration: RS232 port, Telnet, HTTP, HTTPS, SNMP
  ◊ Configuration protected by a password
  ◊ Firmware upgrade (Flash Eprom): from the RS232 port, of FTP transfer.
- Async ports:
  ◊ DB9F DCE socket
  ◊ RS232: TD, RD, RTS, CTS, DTR, DSR, CD, GND
  ◊ RS485, 2 or 4 wire mode: TD, RD, RTS, CTS
  ◊ Data: 7 or 8 bits with or without parity, 1 or 2 stop bits,
  ◊ Rates: 300 à 230,400 BPS
  ◊ Flow control: RTS-CTS, XON-XOFF.
- Digital Inputs / Dry relay contacts: DB9F socket, 2 inputs and 2 outputs.
- Power supply:
  ◊ 230Vac/5Vdc through external adaptor
  ◊ Internal DC converter
     - 18-72Vdc , Model -MC
     - 9-36 Vdc , Model -MC2
  ◊ 5W max.
- Rear panel: 2 async ports (DB9F), RS485 impedance switch for RXD signal, Ethernet port, power supply input
- Front panel: 9 LED's (power, admin, link, TX, RX, TX1, RX1, TX2, RX2).
- Size: 144(L) x 114(P) x 31(H) mm.
- Operating temperature: -25 to +60C
- Hygrometry: 10 to 90%, non condensing
- Weight: 400g
- MTBF: 150,000h

Ordering Information

- **TS 224 [-DI2O2] - M[V/C/C2] [-FX-[MM/SM20]]: 2 ports server, Ethernet 100 MBPS**
    - **DI2O2**   : version with 2 digital inputs and 2 dry relay contacts
    - **MV**   : 110 / 230 Vac external power supply
    - **MC**   : internal 24-48 Vdc converter (18-72VDC range power input)
    - **MC2**   : internal 12-24 Vdc converter (9-36 VDC range power input)
    - **FX-MM**   : version with Ethernet 100BaseFX multi mode fiber
    - **FX -SM20** : version with Ethernet 100BaseFX single mode (20 km)
- **OP-TS224-SSL:** SSL encryption option
- **RACK-DUAL-CPE:** kit to install one or two TS-224 in a 19" bay
- **DIN-CPE:** kit to install a TS-224 on a DIN rail or to fix it on the wall

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