COMETH-EMBD

Serial TTL PCB single port server



- Circuit format
- RS232, RS422, RS485 interfaces
- Easy administration from serial port or Ethernet
- MODBUS/TCP (Client / Server) protocol support
- Raw, Mux., and COM ports re-direction modes
- Metallic case, CE standards





Introduction

COMETH range products give access to any serial equipment from Windows, Unix & Linux computers connected to your Ethernet TCP/IP network, making it possible to communicate between two distant serial equipments through the network or even build an Ethernet / MODBUS gateway.

These products feature a very high integration and a very small form factor.

The support of the Telnet (RFC 2217) extension associated to a COM ports re-director enables distant serial equipments connected to the COMETH to be directly used by Windows & Linux existing applications using standard COM ports.

COMETH combines the flexibility and the power of the TCP/IP protocol as well as the universality of the Ethernet networks.

Technical characteristics overview

Serial port	Single asynchronous serial port, up to 230.4 Kbps 7 or 8 bits per character, 1 or 2 stop bits, even, odd, mark, space or no parity Hardware hand-shake (RTS/CTS) and/or software hand-shake (XON/XOFF)
RS signals available	RS232 : TxD, RxD (3 Tx signals, 5 Rx signals), RTS, DTR, CTS, DCD, DSR, RI (The pin can be used as remote power supply pin)
Connectors	High density connectors
Protection	15KV ESD protection with HF signal filtering, CE conformity, RS/Ethernet 1500 Veff isolation
Ethernet Network	10 Base T Ethernet, 10/100 compatible (RJ 45),TTL signals for the COMETH-EMBD (an external Ethernet isolation transformer is required for the network connection). 10 Base T Ethernet, 10/100 compatible (RJ 45) for the COMETH-EMBD-EVAL. The COMETH Ethernet interfaces are compatible with any 10/100 Base TX equipment (network card or HUB) featuring self-commutation, the serial data transfer between the COMETH and the hub is carried out at 10 Mb/s while the data transfer between the hub and the rest of the network is carried out at 100 Mb/s.
Modes	Support for TCP Client/Server, DHCP Client, TELNET RFC2217 extension, Telnet Server, COM port re-director (VIP), multipoint or point to point virtual link over UDP modes and MODBUS/TCP Client/Server, MODBUS/RTU & MODBUS/ASCII protocols
Administration	From the serial port or through Ethernet (Telnet), firmware download for easy upgrade
Operating systems	Any compatible TCP/IP system
Signaling	1 diag. LED, 1 LAN LED & 1 RS232 LED (COMETH EMBD-ETH only)
Power supply	External, +3,3VDC or +4,5VDC to +5,5VDC
Dimensions & weight	L65 x l20 x h2 mm, 5 g
Environment	Operating temperature: 0°C to +70°C

Ordering references

COMETH-EMBD	Serial (TTL) single channel server over Ethernet (TTL 10 Mbps)
COMETH-EMBD-ETH	Serial (TTL) single channel server over Ethernet (10 Base T), with RJ45 transformer mounted on the PCB
COMETH-EMBD-EVAL	Serial (TTL) single channel server over Ethernet (TTL 10 Mbps), RJ45 transformer provided but not mounted on the PCB, connectors kit
COMETH-ACC-RJ45	RJ45 connector with built-in line isolation transformer (LF1S028) for COMETH-EMBD
COMETH-ACC-C10	10 points high density socket, Ethernet signals (SFMC-105-L3-S-D) for COMETH-EMBD
COMETH-ACC-C18	18 points high density socket, serial signals and LEDs (SFMC-109-L3-S-D) for COMETH-EMBD & COMETH-EMBD-ETH
	NB : COMETH-EMBD model is only available per quantities

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