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

All the brand names mentioned in this document are trademarks. ACKSYS is constantly looking at ways to improve its products. The current specifications may therefore be modified without notice and the characteristics set out herein should not be construed as creating any contractual obligation. All the products featured herein are designed and manufactured in Europe.



07/2016