

# PortBox

## RS-232/485 - Ethernet converter

An RS-232 (RS-485) serial line to Ethernet converter. Communication over TCP/IP and UDP/IP. Built-in support for the Virtual Serial Port, 9-bit communication and RS-485 question-answer communication.

A typical application is remote access to a technology controlled over RS-232 or RS-485.

Another possible application is prolonging the RS-232 line over Ethernet.



### Application Examples

- Card readers, RFID
- PBX accounting systems
- Power supply remote control
- Head-office displays
- Security alarms
- Attendance systems
- UPS controlling
- Electronic key systems
- Sales machines
- Display systems
- Data recorders
- CNC machines
- Chemical and gas chromatographic units
- Bar code scanners

### Basic features

- Ethernet Network - RJ45 (10BASE-T - IEEE 802.3)
- **1x** serial port **RS-232** or **RS-485** accessible over Ethernet
- **Virtual Serial Port driver** for Windows – e.g. **COM 5** in your PC, easy and simple!
- **Two devices** can extend („tunnel“) a serial port over Ethernet
- A wide support of RS-485 question-answer protocols over **UDP/IP**
- A flexible serial **interface** (300..115.200 Bd, 7/8/9 bit communication...)
- **Simple and intuitive** setup software for **Windows**, quick customer installation
- The device can be supplied in different versions: DIN molding / telecommunication device / bracket for wall mounting.
- External power adaptor 9.. 15V / 0.2A
- **Data security** – IP address range or 128-bit TEA algorithm
- **Many free software examples** for various programming languages - MS Visual Basic, Control Web, Delphi, Borland C++, JAVA, PHP and others..

## Technical parameters

Serial port RS-232	
+ Data bits	7 or 8 or 9
+ Stop bits, Parity	1 or 2, None / Odd / Even / Mark / Space parity
+ Baud rates	50..115.2 kBd – entire range, step = 50 Bd
+ Data flow control	XON/XOFF, CTS/RTS, None
+ Interface	1x DB9M (RxD,TxD,RTS,CTS,GND)
+ Used RS-232 signals	RxD,TxD,RTS,CTS, (DTR output – defined voltage level only)
Serial port RS-485	
+ Termination	No internal termination, external termination 120Ω required
+ Isolation	RS-485 line not optocoupled to the device's power supply
+ RS-485 serial port settings	Half duplex and no HW echo recommended
Ethernet port	
+ Interface	RJ45 (10BASE-T) – 10 Mbit or 10/100 Mbit network compatible only!
+ Compatibility	Ethernet: Version 2.0/IEEE 802.3
+ Supported protocols	IP: ARP, TCP + NVT (Network Virtual Terminal)
+ TCP connection closing	Data - timeout 50s (with NVT - ACK/NOP support)
Environment	
+ Operating temperature	+5 .. 50 °C
+ Storage temperature	-10 to 85 °C
+ Humidity (non-condensing)	5 to 95 %
Physical parameters	
+ Power supply requirements	8-24V / Max. current consumption 200 mA DC - barrel (coaxial) power connector, GND on the shield
Functional parameters	
Device SETUP configuration options	- over any RS-232 terminal - over TCP/IP using any telnet terminal on the TCP/IP 99 port - basic network parameters via UDP using the Hercules SETUP utility
Diagnostic LEDs	- Power - Link & Activity

## Intuitive Windows software

