

## CONV485E CONV485E/M

### RS485 TO ETHERNET TCP/IP CONVERTER



- 10BaseT ETHERNET port
- RS485 port (2400 bps to 115,2 kbps)
- 2 modes of operation: Client i Server
- 2 protocols: Ethernet TCP/IP ↔ RS485 and Modbus TCP ↔ RTU
- Support of up to 6 clients
- 5 or 3 LEDs for converter operation
- Simple configuration through web browser
- 2 case versions: plastic or metal
- Can be mounted on TS-35 rail

#### APPLICATIONS:

- Industrial automation, measurement and control systems, measurement laboratories
- Data transfer between computer system (controller) and device with RS485 serial port through computer LAN network or industrial Ethernet network

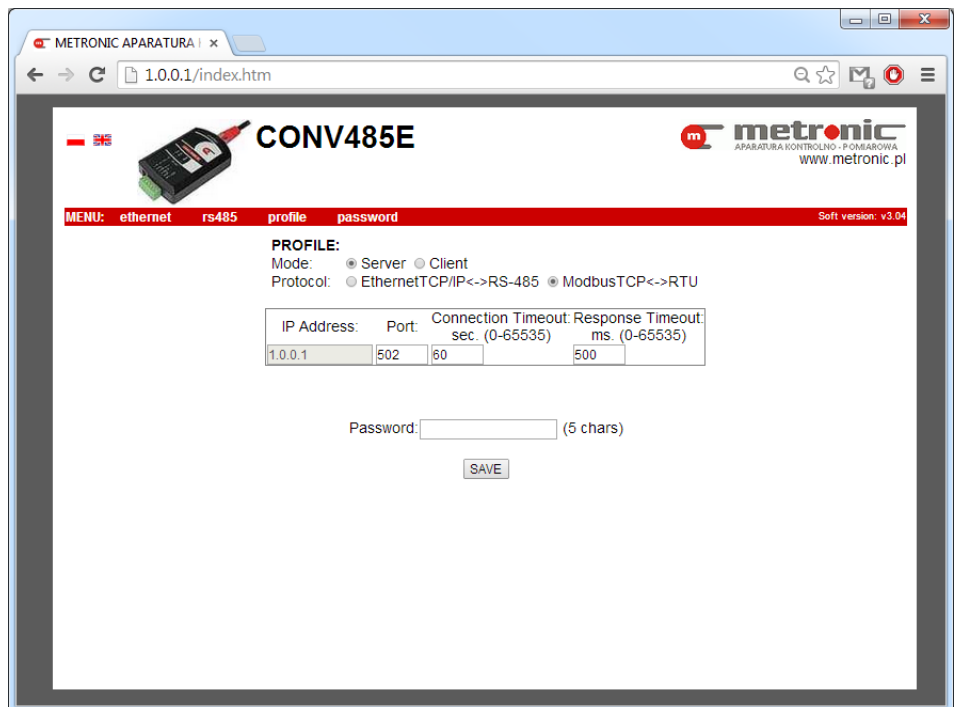
CONV485E is modern, simple converter allows to connect devices with RS485 serial bus to industrial or LAN network. On RS485 side may be connected up to 32 devices up to 1200m line length and on Ethernet port side converter can serve up to 6 clients.

Converter configuration have to be make through standard web browser running on PC computer.

Converter has two case versions:

- ABS material (CONV485E),
- metal (CONV485E/M).

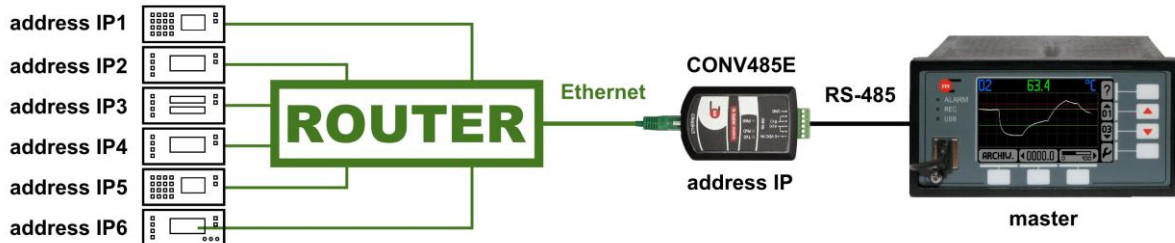
Converter is dedicated to work inside buildings or in control cabinets. Can be mounted on DIN rail.



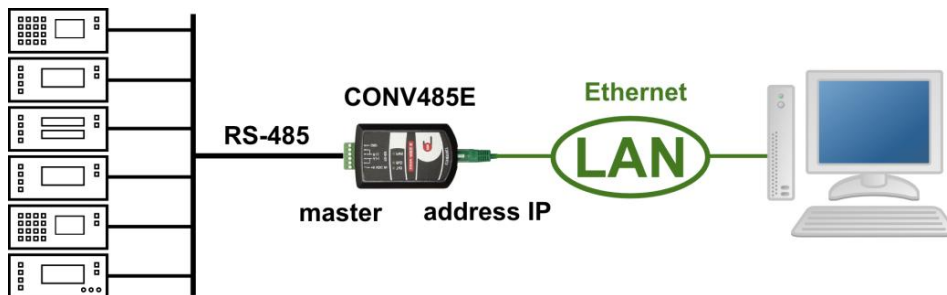
## CLIENT MODE

CONV485E can operate in two modes of operation:

- **Client** – the converter operates as a TCP/IP client, opens the connection to TCP/IP server; enables data exchange between master systems operating in RS485 networks and devices equipped with an Ethernet port.



- **Server** – the converter operates as a TCP/IP server; enables data exchange between master systems operating in RS485 networks and devices equipped with an Ethernet port.



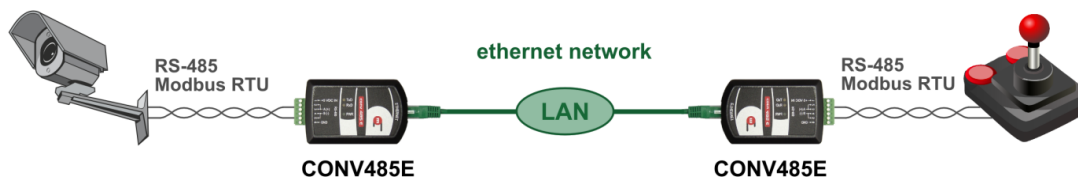
## PROTOCOLS

The converter can operate in two protocols:

- **Ethernet TCP/IP ↔ RS485** – the converter transmits the receives string of characters between a LAN network and an RS485 network and conversely.
- **Modbus TCP ↔ RTU** – the converter receives data from a Modbus TCP protocol device, converts the frame to Modbus RTU protocol and sends the data to and from an RS485 network operating in this standard and conversely.

## EXAMPLE OF APPLICATION

### CONV485E used in the monitoring camera control



## VERSIONS

CONV485E	/ *	
		Plastic casing with RJ-45 connector
	/M	Aluminum casing with M-12 connector

Device version: CONV485E v3.04 / Datasheet version: 2014-05-08

**TECHNICAL DATA**

<b>ETHERNET INTERFACE</b>	
Interface:	10BaseT Ethernet
Supported protocols:	TCP, ICMP (ping), DHCP server, http server
Data buffer:	300 B
Number of simultaneous open connections	Up to 6
Socket:	RJ45 - standard version M-12 (D-coding) – metal casing version
LED diodes:	2, internal in RJ45 socket – standard version None - metal casing version
<b>RS485 SERIAL INTERFACE</b>	
Baud rate:	1.2, 2.4, 4.8, 9.6, 19.2, 38.4, 57.6, 115.2 kbp
Data frame:	1 start bit, 8 data b., 1 stop b. (1 or 2 stop b. for None)
Parity control:	Even, Odd, None1, None2
Data buffer:	300 B
Signals on terminal:	A(+), B(-), GND
Maximum load:	32 receivers / transmitters
Line terminator:	internal, switched with DIP SW only in ABS casing version
Minimum impedance for data transmission line:	54 $\Omega$
Maximal line length:	1200 m
Maximal voltage on terminals A(+) and B(-)	- 8 V $\div$ + 13 V
Minimal transmitter output signal:	1,5 V (for $R_0= 54 \Omega$ )
Minimal receiver sensitivity:	200 mV / $R_{WE}= 12 k\Omega$
Short-circuit / thermal protection:	Yes
LED diodes:	2, TxD (yellow colour) and RxD (blue colour) signalization
<b>POWER SUPPLY</b>	
Supply voltage:	24 VAC (+5% / -10%) / 1 VA 24 VDC (18-36 VDC) / 0,9 W
LED diodes:	1, presence of power supply, green colour
<b>ENVIRONMENTS</b>	
Work temperature / Store temperature:	-20° C $\div$ +60° C / -30° C $\div$ +70° C
Humidity:	5 $\div$ 95% (without condensation)
<b>MECHANICAL DIMENSIONS</b>	
Dimension (length x width x height):	Standard version: 93 mm x 57 mm x 21 mm (without clip for DIN rail) Metal casing version: 111 mm x 60 mm x 32 mm (without clip for DIN rail)
Casing degree of protection:	IP30
Weight:	ca 0,06 kg – standard version ca 0,25 kg – metal casing version

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