



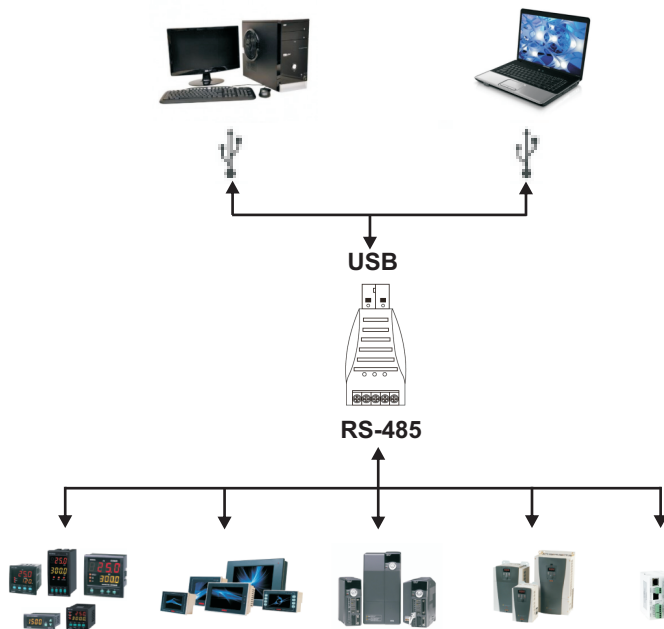
Read this document carefully before using this device. The guarantee will be expired by damaging of the device if you don't attend to the directions in the user manual. Also we don't accept any compensations for personal injury, material damage or capital disadvantages.

## ENDA ECON-485 USB/RS 485 - RS 422 CONVERTER

- \* It works without the need for any private setting or external power supply.
- \* Provides 2500Vrms isolation between the ports.
- \* RS 485 - RS 422 side is protected against high voltages and electro-static discharge through TVS technology (transient voltage suppressor)
- \* Data transfers continues uninterrupted with TVS technology.
- \* The data flow direction detected automatically.
- \* Point to point and point to multi point communication is provided.
- \* 300...921,6kbps support wide communication speeds.
- \* LEDs show dataflow and indicate that the device is active.
- \* Supports all available communication software.
- \* It can be connected easily to all ENDA ModBus communicated devices with Plug-and-play feature.



RoHS  
Compliant



### TECHNICAL SPECIFICATIONS

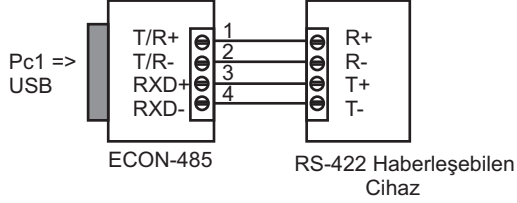
USB	Avilable with USB 1.1 ve USB 2.0 standards
Standards	For RS - 485/422, TIA/EIA
USB signal inputs	VCC, DATA+, DATA-, GND, FG
RS - 485 signal outputs	T/R+, T/R-, GND
RS - 422 signal outputs	TXD+, TXD-, RXD+, RXD-, GND
Operaing mode	Asynchronous operating mode, half duplex, full duplex, point to point or point to multipoint operation mode.
Direction control	The data flow direction is controlled automatically.
Communication speed	300 - 921.600bps (serial port signal is detected automatically)
Load capacity	Supports point to multi point communication. (Max. 32 RS - 485/422 communicated device can be connected to the converter)
Cable Length	For RS 485/422 port: 1,2km (921.600bps - 300bps) For USB port: maximum 5mt
ESD (Electro-static discharge) protection	±15KV
Protection against sudden voltage rise	600W/ms
Connection	USB port: A Type male connction RS 485/422 port: 5 pins terminal connection
Position indicator	Power LED display (PWR), receiver LED display (RXD), transmitter LED display (TXD)
Cabling	Twisted-pair or screened cable
Dimensions	62x33x19mm
Operation temperature	-40 °C ~ 85 °C
Relative humidity	%5 ~ %95 RH
Operation system	Supports Windows98 ~ Win7, Linux and Mac OS

## BAĞLANTI DİYAGRAMI

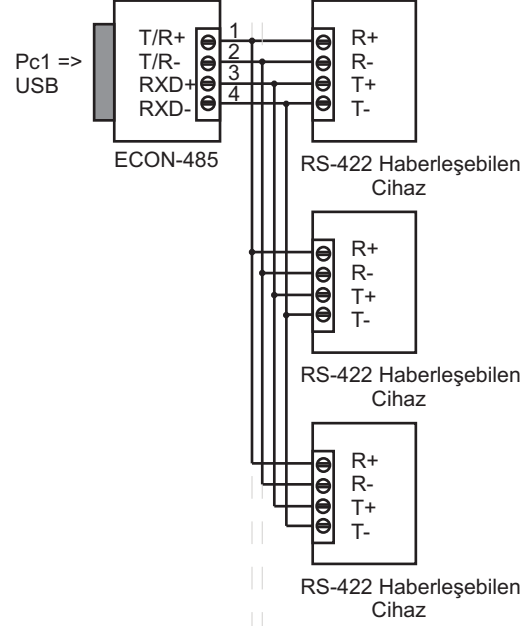
Bağlantı No	Veri Çıkışı	RS 422 Full-Duplex	RS 485 Half-Duplex
1	T/R+	Verici (A+)	RS 485 (A+)
2	T/R-	Verici (B-)	RS 485 (B-)
3	RXD+	Alıcı (A+)	N/C
4	RXD-	Alıcı (B-)	N/C
5	GND	Topraklama	Topraklama

### USB/RS 422 için bağlantı

#### 1. RS 422 noktadan noktaya 4 telli full-duplex

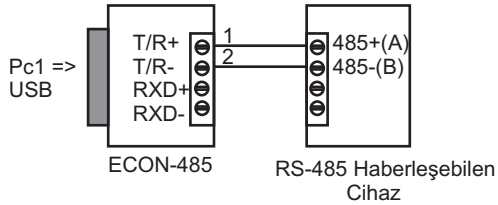


#### 2. RS 422 noktadan çoklu noktaya 4 telli full-duplex

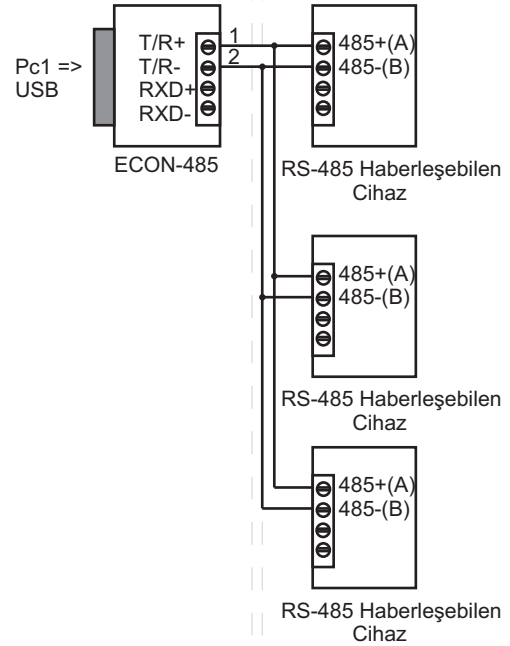


### USB/RS 485 için bağlantı

#### 1. RS 485 noktadan noktaya 2 telli half-duplex



#### 2. RS 485 noktadan çoklu noktaya 2 telli half-duplex



### NOTLAR:

#### 1. Veri aktarımı yok ise:

- USB tarafındaki bağlantıların doğru yapıldığına emin olunuz.
- RS 485/RS 422 tarafındaki bağlantıların doğru yapıldığına emin olunuz.
- Gücün olduğuna emin olunuz.
- Terminal bağlantılarının doğru yapıldığına emin olunuz.
- Veri alındığında LED'in yandığına emin olunuz.
- Veri gönderildiğinde LED'in yandığına emin olunuz.

#### 2. Yanlış veya eksik veri var ise:

- Her iki tarafta da veri akış hızının ve veri formatının aynı olup olmadığını kontrol ediniz.