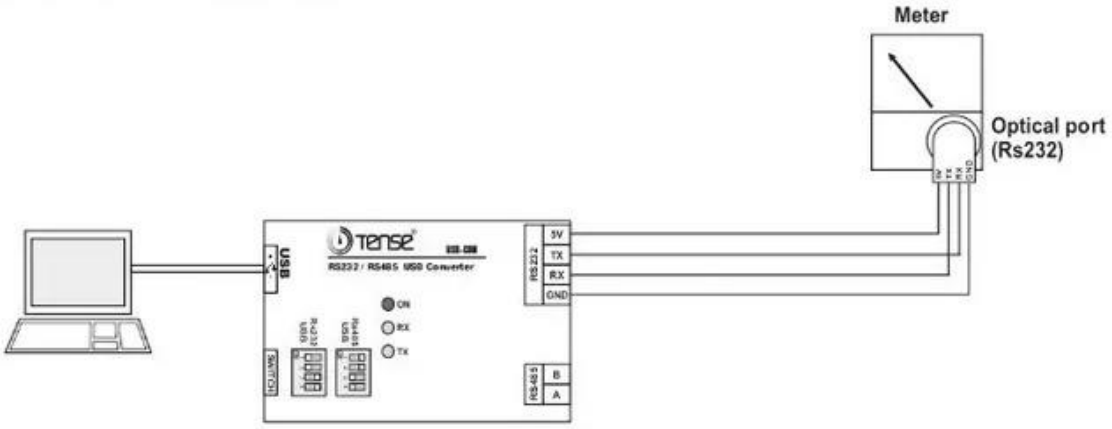
5 - RS232 to USB Connection Schema

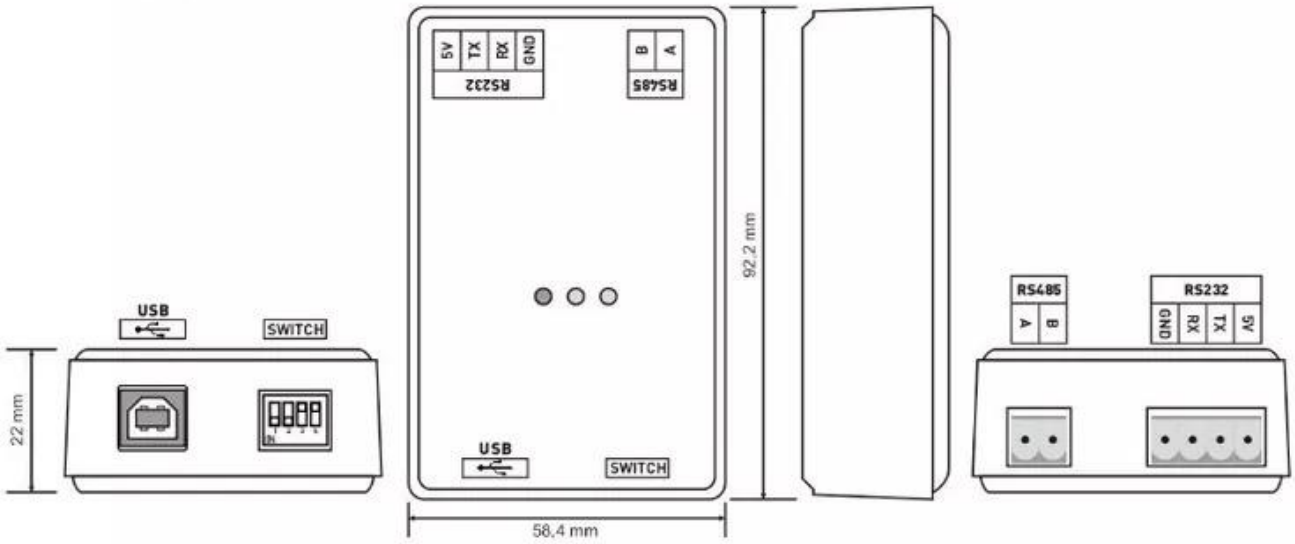


If RS232 connection cable is longer than 2 meter, data loss may occur. You can connect maximum one device. If you use RS485 or Rs232 ports for connection with the meters, you may need to cover the optic head of the meter with black tape. Otherwise, there may be distortion in data.

6 - USB CON and PC Connection Cable

USB-CON and PC connection cable is same type as a figure. Cable of PC connection point should be type -A (male)connector, USB-CON connection point should be type-B (male)

7 - Dimensions



RS232 / RS485 USB CONVERTER — USB-CON

1 - General:

USB-CON converter is used to convert the data in the devices (meter, energy analyzer, reactive power control relay etc.) with communication characteristics such as RS485, RS232 or optic (RS232) ports to USB protocol.

USB-CON-1: is not insulated. The device is not used in communication have no insulation. Otherwise, the devices used in the communication unit may be damaged.

USB-CON: is insulated. The device is used in communication have no insulation.

2 - Start-up of the Device

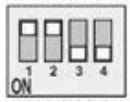
USB-CON/ USB-CON-1 is connected to PC with USB cable. Setup driver using CD with coming device together.

Determine the protocol (RS485 or RS232) that you want to convert to USB. Adjust from dipswitch as shown bellows. Do the connections based on the protocol to be used.

Convert RS485 to USB : Pin numbers of Dip switch are 3 and 4 is "ON" and 1 and 2 is up

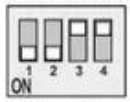
Convert RS232 to USB : Pin numbers of Dip switch are 1 and 2 is "ON" and 3 and 4 is up

RS485 / USB



SWITCH

RS232 / USB



SWITCH

3 - Technical Specifications

Support USB 1.1 and USB 2.0 protocol

Support 300 ..... 230.4k communication speed

Automatic direction control

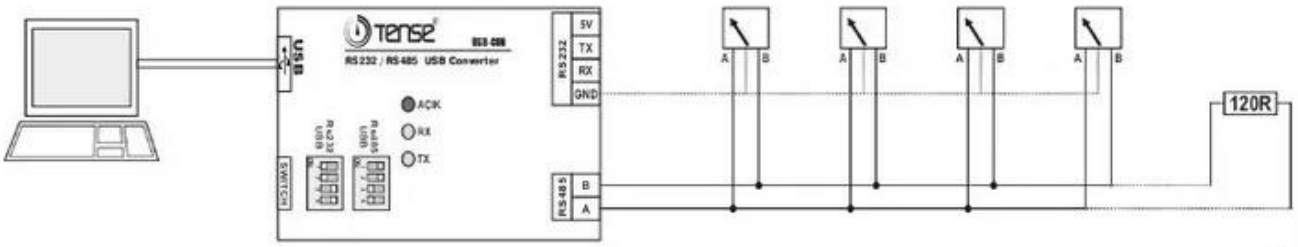
Power Led and communication LED (Tx and Rx)

Selectable RS232 to USB or RS485 to USB converting

Energy supplied from USB port .Do not connect any external power supply through the device.

Insulated is optional .USB-CON is insulated ,USB-CON-1 is not insulated.

4 - Rs485 to USB Connection Schema



RS485 connection cable length should be about 1000 meters. When the cable distance or the number of the devices increases, 120R resistance given with the device can be connected to the network. Maximum 256 devices can be connected.

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