



Optical probe for connecting PCs and PDAs to electricity and gas tariff meters

General features

ZVEI – CEI EN62056-21 (previous IEC 61107) optical probe is an interface used to connect PCs and PDAs to electricity and gas tariff meters, with galvanically insulated connection.

It allows the bidirectional communication between the two devices, transmitting with an infrared led and receiving with a phototransistor; the device power supply is provided directly via PC serial / USB interface. A special circuitry allows to limit the current absorption to few mA, granting a perfect operation with any RS232 serial port or USB port.

To simplify the implementation of the communication software, echo suppression is electronically ensured in reception. Echo would be otherwise present due to optical reflections.

The magnet used in the device is a “rare earth elements” type, in order to ensure a better fit to the meter than a traditional ferrite magnet ($F > 15N$).

The USB probe can be equipped with a USB type A connector (PC):



or with a USB type C connector (Tablet, Smartphone).



Both of them are USB 1.1 and 2.0 full speed compatible. In www.teamware.it Windows 7/10 drivers are available: drivers for other operating systems can be found on the web page of the chip producer: (FTDI - <http://www.ftdichip.com/FTDrivers.htm>).

The serial probe can be equipped with a SUB-D 9 male pin connector for PDA connections (DCE), or with a SUB-D 9 female pin connector for PC connections (DTE).

The Zvei probe is manufactured in full compliance with CEI EN 62056-21 (previous IEC 61107) standard.

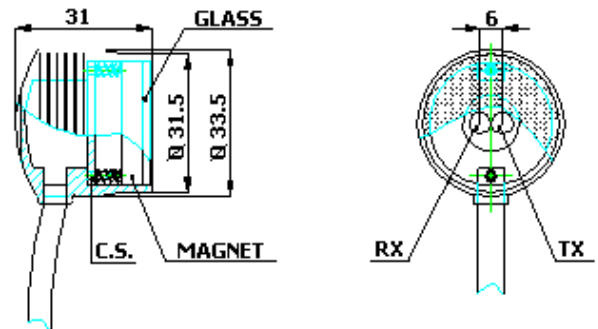
Technical specifications

Interface: IEC RS-232C / USB

Consumption: with DTR (+15V) power supply:
 < 15 mA (in tx); < 10 mA (in rx)

Baudrate: from 300 to 19200 bit / sec.

Size (mm.)



Cable

Cable length is 1.5 meters.

Order codes

USB probe, type A connector: **038S431**

USB probe, type C connector: **038S454**

RS232 male probe: **038S411**

RS232 female probe: **038S432**

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