

# tensioLINK<sup>®</sup> USB Converter

**METER**



# 1. Introduction

The tensioLINK-USB converter is used to connect sensors and devices with serial *tensioLINK* interface to a PC. These sensors and devices then can be configured, and readings can be uploaded or taken online.

Sensors and devices with an 8-pin plug type M12 (e. g. T8) and a 4-pin plug type can be connected to the converter directly.

The USB port provides the power supply.

The interface is controlled with the Windows software *tensioVIEW*. TensioVIEW software is available on the [METER website](https://meter.ly/environment-downloads-software). (<https://meter.ly/environment-downloads-software>).

## 1.1 Which sensors and devices can be connected?

Some of the sensors and devices with tensioLINK interface are:

- T8
- TEROS31, 32\*
- Infield7b Handheld
- VS-2005 vacuum station
- HYPROP inc. adapter cable and T-piece

\* M12 4-pin Version

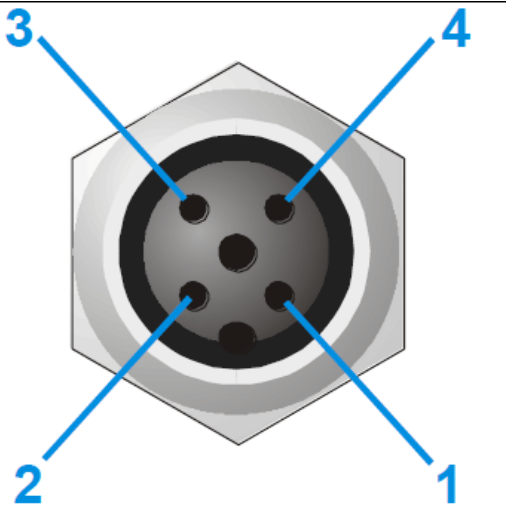
## 1.2 What are the requirements?

- Windows PC with USB port (500 mA)  
<https://meter.ly/environment-downloads-software>)

### 1.3 Plug configuration

4-pin M12 version:

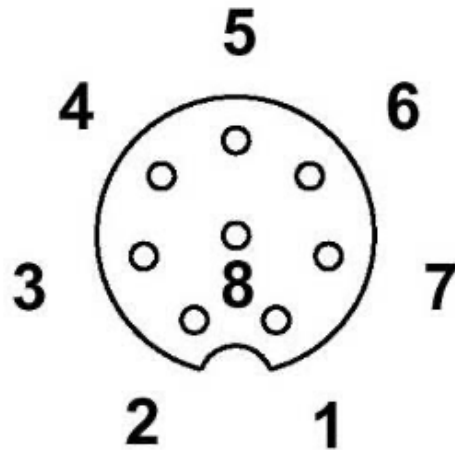
Signal	Wire color new	Function	PIN
V+	brown	6...20VDC	1
A	white	RS485-A	2
GND	blue	GND	3
B	black	RS485-B	4



The diagram shows a top-down view of a 4-pin M12 connector. The four pins are arranged in a square pattern. Blue lines with numbers 1, 2, 3, and 4 point to the pins in a clockwise direction starting from the bottom-right position.

8-pin M12 version:

Signal	Wire color	PIN
+9V/100mA	white	1
GND	brown	2
nc	green	3
nc	yellow	4
nc	grey	5
RS485-A	pink	6
RS485-B	blue	7
nc	red	8



Female 8-pin plug  
on USB converter

To connect several sensors and devices at the same time distributor boxes are available as an accessory.

If the current consumption of all connected sensors and devices exceeds the capability of the USB port, the sensors and devices need to be supplied by an external power supply. The GND of the external power supply must be connected to the GND of the USB converter.

As standard not more than 5 sensors and devices should be supplied by the USB converter at the same time.

Devices like the Infield7b or the VS-2005 have the capability to read tensioLINK sensors themselves. These devices are equipped with a female 8-pin plug. Connect them to the USB converter with the supplied "host cable" (male to male plug).

With the host cable it is possible to get linked to the tensioLINK bus directly on any free port of a distribution box. This means that sensor communication is possible without separating them from the bus and the power supply.

## **2. Installation**

Follow the steps for installation described in the following sections.

### **2.1 INSTALLATION OF THE USB CONVERTER**

**Note:** depending on the language of your Windows version the displayed messages might somehow be different.

1. Go to [METER website](https://meter.ly/environment-downloads-software) and download the tensioVIEW software (<https://meter.ly/environment-downloads-software>).
2. Connect the tensioLINK USB-converter to a suitable USB port. The message that a new hardware is available should be displayed on your desktop.

3. The hardware assistance will ask, "Search for software on this PC or establish a connection to the Windows Update webpage for searching for the software?" or a similar message.
  - Select "NO, not this time,"
  - Select **Continue**
4. In the next window select:
  - "Install software automatically (recommended)"
  - Select **Continue**

The software should be installed now.

**NOTE:** If a warning message like: "... the hardware has not passed the Windows Logo Test ..." or a similar message appears, select, **Continue** installation.

The driver for the USB converter should now be installed successfully.

## 2.2 INSTALLATION OF TENSIOVIEW

Download the setup.exe file from the METER [website software downloads](https://meter.ly/environment-downloads-software) (<https://meter.ly/environment-downloads-software>).

Follow the instructions of the installation assistance.

## 3. Technical specifications

Sensor power supply:	9 VDC/100mA
Tolerance:	±1 V
Short circuit steadiness:	2 minutes
Galvanic isolation:	1 kV

**Note:** tensioLINK sensors require a power supply in the range of 6V to 20 VDC.

For the maximum number of sensors and devices that can be connected at the same time consider the maximum power consumption of each device, not the average consumption!

### **Serial sensor interface:**

RS485 – 2 wire.	Automatic switching TX-RX.
ESD protection:	15 kV (Human Body Model)
Galvanic isolation:	1 kV

**USB interface:**

USB 1.1 and 2.0 compatible. Only for USB ports with 500 mA maximum output current.

**Compliance:**

A full CE declaration of conformity is available on request from METER Group.

## 4. Customer Support

### NORTH AMERICA

Contact our customer service representatives with questions, problems, or feedback Monday through Friday, 7 am–5 pm Pacific time.

**Email:** [support.environment@metergroup.com](mailto:support.environment@metergroup.com)

[sales.environment@metergroup.com](mailto:sales.environment@metergroup.com)

**Phone:** +1.509.332.5984

**Fax:** +1.509.332.5158

**Website:** [metergroup.com](http://metergroup.com)

### EUROPE

Customer service representatives are available for questions, problems, or feedback Monday through Friday, 8 am–5 pm Central European time.

**Email:** [support@metergroup.de](mailto:support@metergroup.de)

[sales@metergroup.de](mailto:sales@metergroup.de)

**Phone:** +49 89 12 66 52 0 **OR** +49 89 12 66 52 36

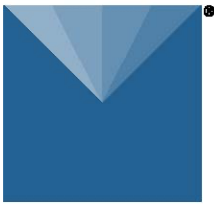
**Fax:** +49 89 12 66 52 20

**Website:** [metergroup.de](http://metergroup.de)

If contacting METER by email, please include the following information:

Name	Email address
Address	Instrument serial number
Phone	Description of the problem

**NOTE:** For products purchased through a distributor, please contact the distributor directly for assistance.



**METER**

#### **4.1 TERMS AND CONDITIONS**

By using METER instruments and documentation, you agree to abide by the METER Group, Inc. USA Terms and Conditions. Please refer to [metergroup.com/terms-conditions](http://metergroup.com/terms-conditions) for details.