SENSORFACT

Smart Monitoring for the Industry

(Teltonika TRB145)

COMPRESSED AIR BRIDGE

Read out flow, pressure, and temperature every minute to quantify leakages, control pressure, and optimize your system.

Overview

For each sensor location you need the following three item:

1. SENSOR:

Depending on your pipe situation you will receive either an insertion sensor or an inline sensor:

- VPFlowScope M or
- VPFlowScope In-line

2. BRIDGE/TRANSMITTER:

- Teltonika TRB145
- 4G Antenna
- SIM card (already in the device)

3. SPLITTER CABLE:

- Splitter side to the sensor
- Connector to the bridge
- Power supply to both bridge and sensor.

1 INSTALL THE SENSOR

Follow instructions from the installation manual by VPInstruments to install the sensor (VPFlowScope M or VPFlowScope Inline depending on your pipe situation).

VPINSTRUMENTS.COM

VP INSTRUMENTS

VPFlowScope M

User manual
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MAN-VP-SMPR-EN-2401 Last Revision Date: 16-07-2024

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VP INSTRUMENTS

VPFlowScope In-line

User manual
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2 PREPARE THE BRIDGE

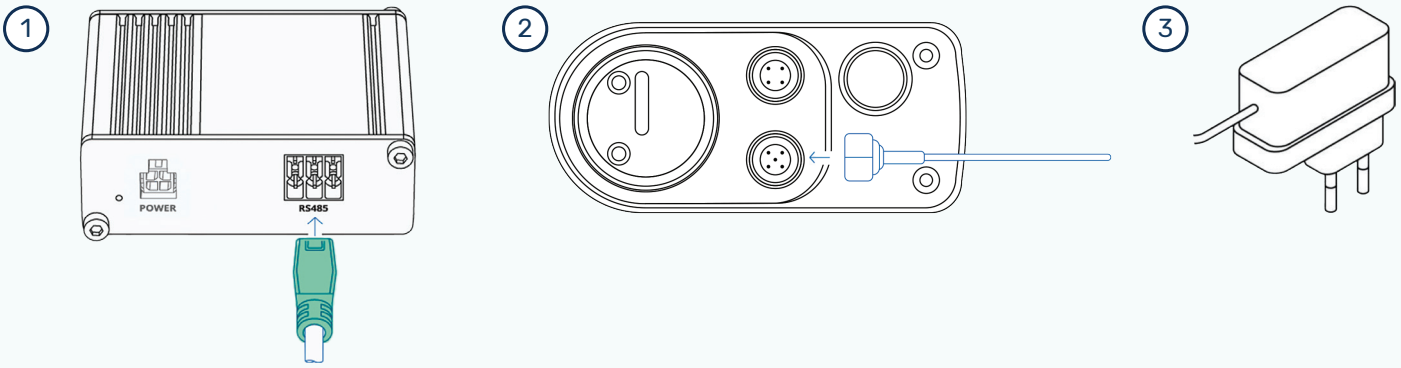
Determine the type of sensor (insertion or inline). The bridges are configured for one type of sensor (indicated with a sticker on the package and on the bridge itself) so please only install an inline bridge only on an inline sensor and vice versa. You should have received the right amount of sensors and respective bridges. Unpack, screw the black antenna into the device*.

*example of a correctly assembled antenna onto the bridge

3 CONNECT SENSOR TO BRIDGE AND POWER

Use the splitter cable we sent you to connect the sensor to both power and to the bridge. It has three connectors:

1. Green RS485 connector for the bridge (see photo bottom left),
2. 5-pin M12 connector for the sensor,
3. Power adapter.



Note: Always connect the RS485 connector (the green plug) to the bridge before plugging in the power adapter! This prevents a short circuit due to incorrect insertion of the RS485 connector.

1. Connect the green connector to the bridge. There is only one correct way to connect it to the bridge. If it does not connect easily, turn the connector 180 degrees. Do NOT force it in the other way. This can cause a short circuit in the bridge.

2. Connect the cable to the meter.

3. Only then connect to power supply. It will supply both the sensor and the bridge with power.

In the end, the connection should look something like the picture on the right.

*Example of correct connection.

4 CONTROL THE SIGNAL STRENGTH

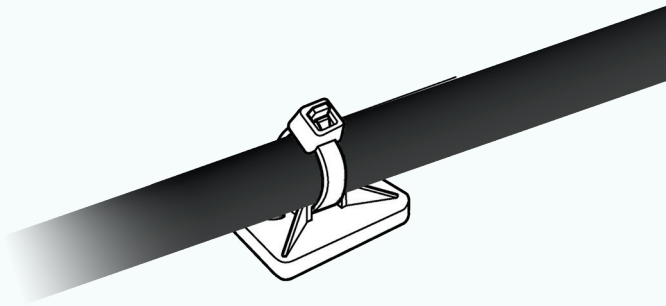
On the side of the bridge, there are three LED's that indicate the mobile network connectivity*. Once, you have plugged in the power adapter, one or more of the mobile network LED's should switch on. They might blink initially but should eventually stop blinking. You should see one or more constant LED's that indicate the strength of the network. If the LED's keep blinking, please reach out to your onboarding manager.

Example of mobile network connectivity LED's.

5 ARRANGE CABLES AND FIX BRIDGE

The cables might be long. You can easily tie them around the pipe or fold them up. Fix them with a tie-wrap.

In order to prevent the cables to get lose or the bridge to drop, please make sure the bridge is also tied to the pipe with tie-wraps or something similar.



6 NOTIFY THE ONBOARDING MANAGER TO FINALIZE CONFIGURATION

Let your onboarding manager know which bridge on which location so that they can finish the configuration.

We still need to know which sensor/bridge has been installed to which sensor location. Therefore, please write down the ID of the bridge and let your onboarding manager know on which location it has been installed. We will finish the configuration for you.or something similar.

SECURITY CONTEXT

The security of your system begins with the physical protection of its components. Our devices, including sensors and bridges, are designed with robust software and encrypted communication protocols to ensure data integrity and privacy. However, the physical security of these devices is entirely the responsibility of the customer. Unauthorized access to or tampering with the hardware can compromise the system and potentially expose sensitive data.

To maintain the highest level of data security, customers must ensure that all devices are installed in secure, access-controlled locations and inspected regularly for signs of interference. Failure to adequately protect the physical hardware may lead to vulnerabilities that cannot be mitigated through software alone. Therefore, physical safeguarding is a critical aspect of the overall security posture of your deployment.