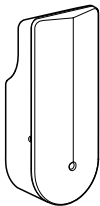


User manual

Tibber Pulse P1 (RJ12)



Let's get started:

1. Download the Tibber app

Search for Tibber on the App Store/Google play store or scan the QR code to download the app.



2. Create your Tibber account

Energy subscription is optional.

3. Pair the Pulse

Go to the "Power-up" section in the Tibber app and add the Pulse

You need to contact your grid company to enable the data from your meter.

1. Intended use

The Pulse is intended to be used to read data from your electricity meter and transfers it to the Tibber app. Depending on your smart meter, the refresh rate varies between 1 to 10 seconds. The product is intended for domestic use.

1.1 Retaining instructions



Read and understand this manual and its safety instructions before using this product. Failure to do so can result in severe injury or death. Follow all the instructions to avoid fire, explosions, electric shocks or other hazards that may damage property. The product shall only be used by persons who have fully read and understand this user manual's content.

Ensure that every user of the product has read these instructions prior to use and follows them. Keep all safety information and instructions for future reference and pass them on to subsequent product users. The manufacturer is not liable for cases of material damage or personal injury caused by incorrect handling or non-compliance with the safety instructions. In such cases, the warranty will be voided.

1.2 Obtaining documentation and information

The latest version of the documentation is available in multiple languages at https://pulse.tibber.com/rj12_manualComments on the document can be submitted to our support team in the Tibber app or sent via email to hello@tibber.com. Your comments are much appreciated!

2. Description of the product

2.1 Technical details

The Pulse is designed to work with energy meters that support the P1 style RJ12 port that follows the DSMR 4.0 standard or a more up to date version of it (Dutch Smart Meter Requirements Version 4.0 which also includes IEC 62056-61 and IEC 62056-21 data exchange). If your smart meter supports a version of the DSMR standard developed prior to 4.0 the Pulse will require external power through USB (power supply and cable are not included in the product).

Note that the "Swedish recommendation for customer interface in smart meters" (Branschrekommendation för lokalt kundgränssnitt för elmätare) is based on DSMR 5.0 but does not specify that the meter may provide power to external devices from the P1 port. Most meters in Sweden will provide power to the Pulse despite it not being required. An exception is the Kamstrup Omnipower devices as they do not supply power.

The Pulse is meant to be connected to the Tibber app (available on Google Play and Apple App Store). There is an API available for advanced users at <https://developer.tibber.com/> for further data collection.

The Pulse may only be used with the cable included in the delivery. Using a different cable can cause damage.

2.2 Product compliance

Hereby, Tibber AS declares that the radio equipment type Pulse P1 (RJ12)-version complies with the directive 2014/53/EU. The complete version of the EU declaration of conformity is available at the following internet address: https://pulse.tibber.com/rj12_conformity

2.3 Technical data

Parameter	Unit
Device name	Pulse
Model	RJ12/Lando Edition
Technical life span	>5 years
Power usage	500 mW during pairing, 175 mW during normal operation

Frequency band	2401 MHz to 2483 MHz
Maximum power transmitted	20 dBm
Weight	40,5 g
Dimensions (d*h)	33 x 80,5 x 24,5 mm
Physical interface	RJ12
Supported protocols	DSMR 4.0, DSMR 5.0, 62056-61, IEC 62056-21
Cable length	1 m
Cable connectors	RJ12
Cable wiring	Normally wired: 1-1, 2-2, 3-3, 4-4, 5-5, 6-6
Ingress protection (IP)	IP20 (Not waterproof)
Temperature range	-20 °C to 50 °C

3. Installation and setup

Follow the instructions on the first page of this manual. You will be guided through the setup process in the Tibber app. Connecting the Pulse to the smart meter and pairing it with your Wi-Fi® network.

4. Troubleshooting

4.1 Explanation of common visual signals

Signal	Meaning
Normal operation	
White / White with blinking	Pulse is booting up.
Green	Pulse is ready to be paired.
Green blinking	A phone has been connected to the Pulse (only during pairing).
Blue blinking	Pulse is trying to connect to the Wi-Fi® and our server
Weak blue	Pulse is connected to our server.
Weak blue / short blue blinking	Blue blinking indicates data transfer to our server.
Yellow blinking	Firmware is being updated, do not disconnect from the power.

Error states	
Continuous red	Connection to Wi-Fi® network failed. Usually, the light will alternate between this state and blue blinking when trying to connect to the Wi-Fi®
Red blinking	Pulse connected to the Wi-Fi®, but not able to reach the server.

4.2 Problem-solving from LED

Signal	Meaning
Continuous red light	It is possible that the Wi-Fi® signal is not strong enough. Try to improve the signal by moving the pulse to another spot.
Red blinking	Try to reset the device by holding the reset button for at least 5 seconds. Then pair the device again following the instructions in the app.

If you encounter other light combinations or have any problems with our product, please contact us, preferably in the app or via email to hello@tibber.com If you are having any problems during pairing; first try again then if it still fails please contact us through our support channels or see our troubleshooting guide at https://pulse.tibber.com/rj12_troubleshoot

5. Safety instructions

⚠ WARNING When accessing the fuse or meter cabinet, make sure you first inspect the meter and its surroundings to ensure there are no hazards in the form of loose cables, exposed copper or other objects that shall cause an electrical shock.

If you encounter any of these threats, abort our product's installation immediately and contact an electrician. Before use, inspect the device for any physical damage. If there is any physical damage to the device, stop the installation process immediately and contact support.

⚠ CAUTION Use only the included cable to avoid damage to the device and/or the smart meter. If the cable is damaged, contact us in order to receive a new one. Avoid placing the device in a very hot or humid environment. Failure to do so can reduce the lifetime of the device.

Do not place the device outside in rain or snow. The device is NOT waterproof. Using the device outside of the specified temperature range (-20°C to 50°C) may cause it to malfunction. If the device is opened, it shall be damaged. If it is dropped, it shall be damaged. Any other type of shock can also damage it. Store the device in a dry environment.

6. Disposal

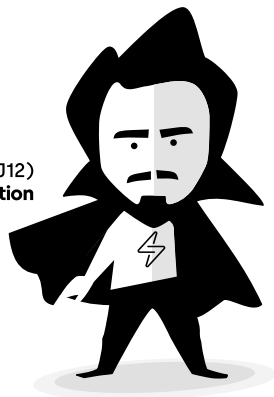
6.1 Disposal of electronic components

 This symbol on the product, the accessories or packaging indicates that this device may not be treated as unsorted municipal waste, but may be collected separately! If you live within the EU or another European country that operates separate collection systems for electrical waste and electronic equipment, ensure the device's appropriate disposal at a collection recycling location. By properly disposing of the device properly, you help avoid possible environmental and public health hazards that shall otherwise be caused by improper treatment of waste equipment. The recycling of materials contributes to the conservation of natural resources.

6.2 Disposal of packaging waste

The packaging is made of environmentally friendly materials, which may be disposed of at your local recycling facilities. By properly disposing of the packaging and packaging waste, you help avoid possible environmental and public health hazards.

Pulse P1 (RJ12)
Lando Edition



 **tibber**

Tibber AS, Hafstadvegen 23, 6800 Førde, Norway
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