Jetter
automation

User Manual

JTM-4G-WiFi

Telemetry Module

60887424_00

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Translation of the german original User Manual

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Table of Contents

1 Introduction

1.1 Information on this document

This document forms an integral part of the product and must be read and understood prior to using it. It contains important and safety-related information for the proper use of the product as intended.

Target groups

This document is intended for specialists with appropriate qualifications.
Only competent and trained personnel is allowed to put this device into operation.
During the whole product life cycle, safe handling and operation of the device must be ensured. In the case of missing or inadequate technical knowledge or knowledge of this document any liability is excluded.

Availability of information

Make sure this document is kept at the ready in the vicinity of the product throughout its service life.
For information on new revisions of this document, visit the download area on our website. This document is not subject to any updating service.

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For further information refer to the following information products:

- Application Notes
  Technical reports and application examples
- Version updates
  Information about changes to the software products and operating system of your device

1.2 Typographical conventions

This manual uses different typographical effects to support you in finding and classifying information. Below, there is an example of a step-by-step instruction:

✓ This symbol indicates requirements which have to be met before executing the following action.

► This sign or a numbering at the beginning of a paragraph marks an action instruction that must be executed by the user. Execute the instructions one after the other.

⇨ The target after a list of instructions indicates reactions to, or results of these actions.

ⓘ INFO

Further information and practical tips

In the info box you will find helpful information and practical tips about your product.

2 Safety

2.1 General Information

When placed on the market, this product corresponds to the current state of science and technology.
In addition to the operating instructions, the laws, regulations and guidelines of the country of operation or the EU apply to the operation of the product. The operator is responsible for compliance with the relevant accident prevention regulations and generally accepted safety rules.

E1 type approval The device has an E1 approval according to ECE R10 Rev. 5.

CE The device is CE compliant according to the ISO 14982 standard on agricultural and forestry machinery.

RoHS 2 The device conforms to the EU directive 2011/65/EU (RoHS 2).

Radio Equipment Directive The radio frequency components installed in the device comply with the 2014/53/EU Radio Equipment Directive.

2.1.1 Regional Restrictions

Product variant JTM-4G-WiFi-E02-EU-K00 is designed for the EMEA Economic Area (Europa, Middle East and Africa). It is equipped with a Sierra Wireless module WP7607-1:

www.sierrawireless.com/iot-solutions/products/wp7607

Observe the following notices:

- A fallback to 3G is not supported because the 3G networks are not supported by the operators in the EU.
- For applications outside the EU, local approvals may be required.
- For applications outside the EMEA region, special purchase orders and certifications are required.
- This product variant can only be used in the specified regions. Other regions are available on request. The Non-EMEA product variants are based on the corresponding WP76xx modules.

2.2 Purpose

2.2.1 Intended use

The JTM-4G-WiFi telemetry module can be used to connect mobile work machines with the Internet and to access the machine.

The JTM-4G-WiFi is only intended for low-voltage applications.

Operate the device only in accordance with the intended conditions of use, and within the limits set forth in the technical specifications.
Intended use of the product includes its operation in accordance with this manual.

2.2.2 Usage other than intended

The device was not developed for safety applications such as brakes, steering, response to an emergency or life-saving functions. Applications of these types are strictly prohibited.

The device is designed exclusively for low-voltage applications. A direct connection to high-voltage circuits is prohibited.

2.3 Warnings used in this document

⚠ DANGER

High risk

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

Medium risk

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Low risk

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Material damage

Indicates a situation which, if not avoided, could result in malfunctions or material damage.

3 Product Description

The JTM-4G-WiFi telemetry module is designed for mobile automation, including agricultural and forestry machinery. It communicates wirelessly via LTE CAT-1 and WiFi or in the vehicle network via CAN and USB.

The JTM-4G-WiFi is capable of running the user's machine-specific software modules. The programming environment is based on the Sierra Wireless Legato Framework, which in turn is based on System Embedded Linux. This framework provides access to all communication channels and options for processing and storing data.

3.1 Design

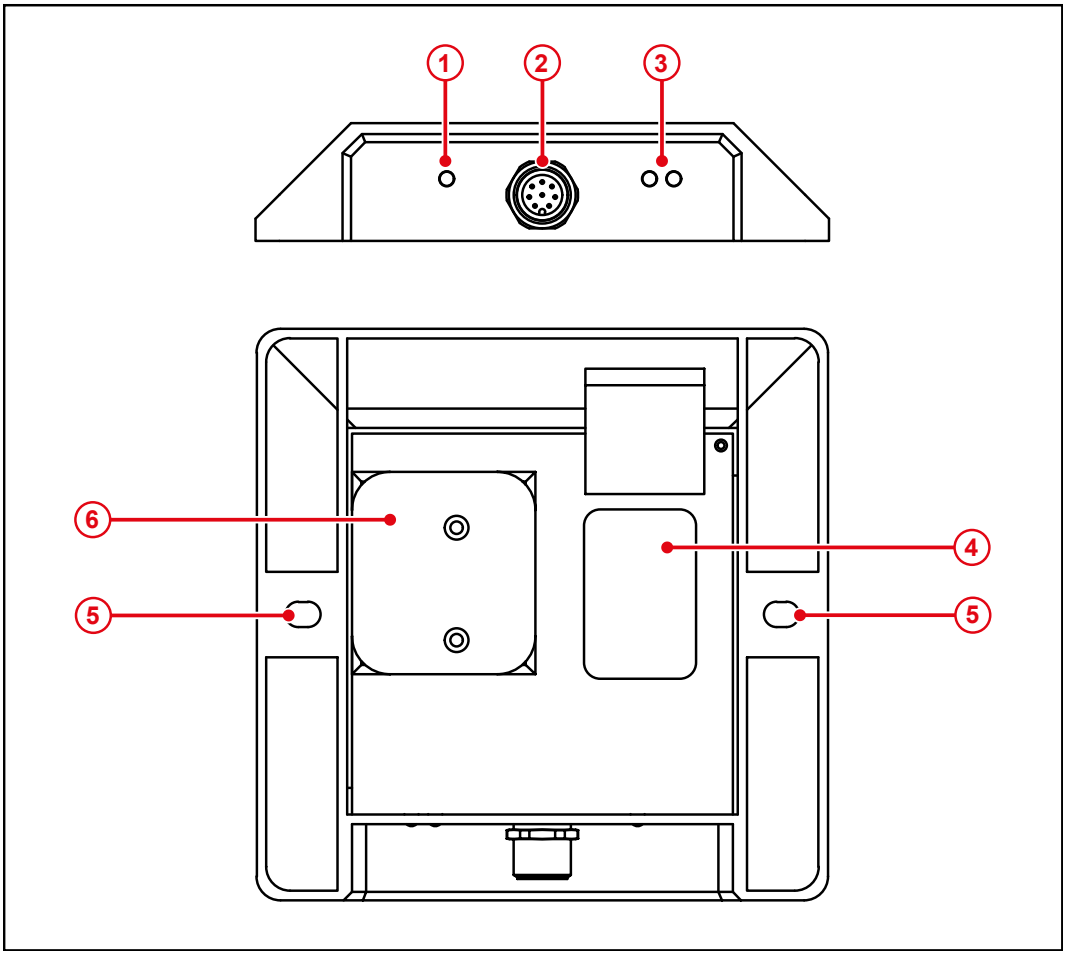


Fig. 1: Design

1	LED ⏻
2	M12 male connector
3	LEDs 📍 and 📶
4	Position of the nameplate
5	Fastening lugs
6	Cover

3.2 Product features

- LTE-CAT-1 wireless connection (4G) with 2G fallback option
- Remote access to various machines
- Device management cloud
- Internal web server
- GNSS antenna
- WLAN antenna
- WiFi interface
- MicroSD card slot
- Micro-SIM slot
- Integrated eSIM from Sierra Wireless
- 2x CAN

3.3 LED indicators

The JTM-4G-WiFi has 3 LEDs.

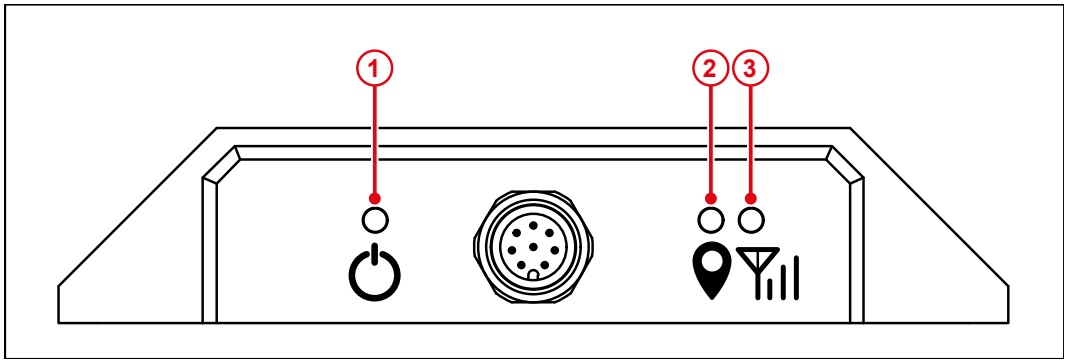


Fig. 2: LED indicators

LED	Icon	Indication
1		Operating state
2		GNSS signal
3		Widiin cloud connection

3.3.1 Diagnostic capability via LEDs

LED	Status	Color	Description
	OFF	---	
	ON	Green	Power supply is present.
	OFF	---	
	ON	Green	GNSS receiver is receiving position information.
	OFF	---	
	ON	Green	Identification and connection to the Widiin cloud were successful.

3.4 Nameplate

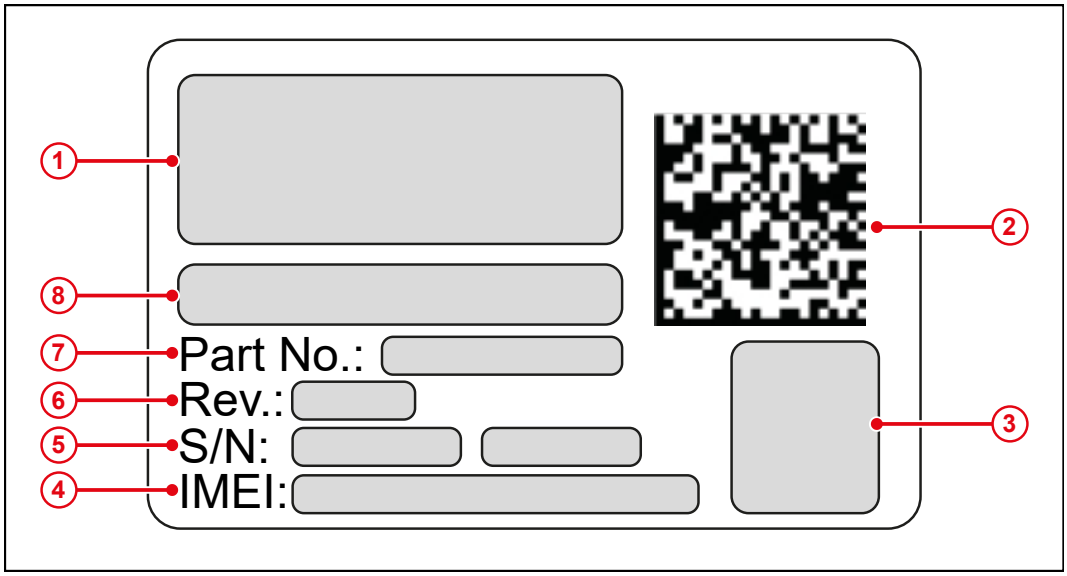


Fig. 3: Nameplate

1	Company logo
2	Data matrix code
3	Certification mark
4	IMEI number of the Sierra Wireless module
5	Serial number
6	Hardware revision
7	Item number
8	Item name

3.5 Scope of delivery

Scope of delivery	Item number	Quantity
JTM-4G-WiFi-E02-EU-K00	10001971	1

4 Technical specifications

This chapter contains information on electrical and mechanical data as well as operating data of the JTM-4G-WiFi.

4.1 Dimensions

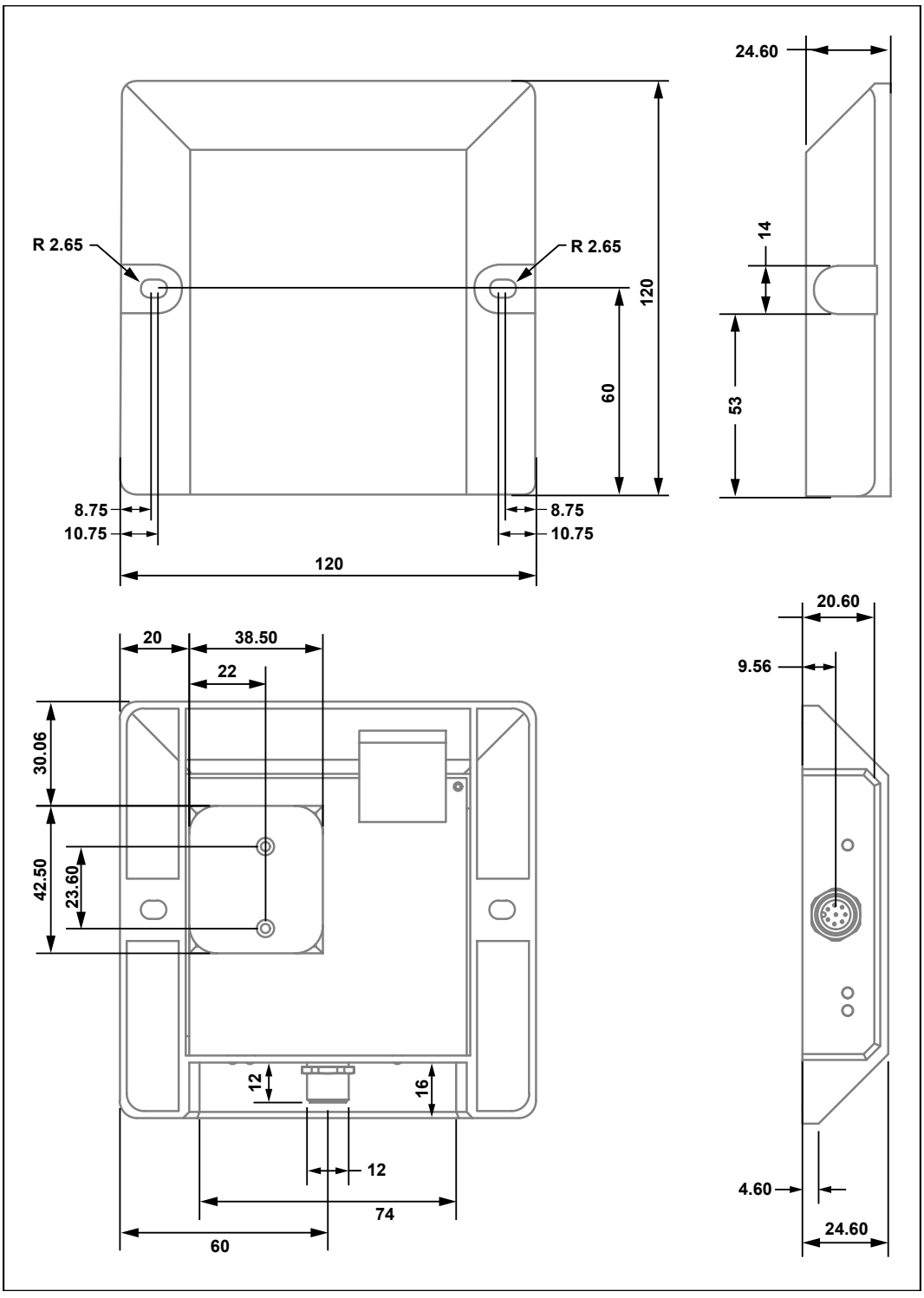


Fig. 4: Dimensions in mm

ⓘ INFO

CAD data

CAD data of the device can be found in the download area of our *homepage*.

4.2 Mechanical specifications

Parameter	Description	Standards
Mounting orientation	Vertical or horizontal	
Weight	~ 350 g	
Enclosure specifications		
UV radiation protection	Resistant to direct sunlight	
Vibration		
Floating frequency	10 Hz ... 150 Hz	ISO 16750-3
Duration	6 h	
Shock resistance		
Type of shock	Half-sine wave	ISO 16750-3
Intensity and duration	50 g (500 m/s^2) for 11 ms	
Degree of protection	IP67	
	IP6K9K is only possible if the M12 male connector is covered with an external rubber protector against high-pressure water jets.	

Tab. 1: Mechanical specifications

4.3 Electrical properties

Power supply

Parameter	Description
Operating voltage	DC 8 V … 32 V
Load-dump protection	12 V system
Protection against polarity reversal	Reverse-polarity-tolerant
Typical consumption	<2 W with continuous LTE communication
Recommended fuse	1 A at UB+ (slow-blow)

Tab. 2: Technical data – power supply

CPU

Parameter	Description
Application processor	ARM® Cortex™-A7 (1.3 GHz)
Co-processor	ARM® Cortex™-M3 (72 MHz)

Tab. 3: Technical data – CPU

Memory

Parameter	Description
RAM	256 MB
Flash	512 MB

Tab. 4: Technical data – memory

4.4 Ports and interfaces

EU-4G modem

Parameter	Description	
Category	LTE CAT-1 with internal double antenna	
Downstream	10 MBit/s	
Upstream	5 MBit/s	
LTE bands		
4G	B1, B3, B7, B8, B20, B28	
2G	EDGE, GSM, GPRS	900 MHz, 1,800 MHz

Tab. 5: Technical data – EU-4G modem

WiFi

Parameter	Description
Antenna	internal
Frequency/ISM band	2.4 GHz
Standard design	IEEE 802.11 b/g/n-Modi

Tab. 6: Technical data – WiFi

CAN

Parameter	Description
Format	CAN 2.0 B
Number of interfaces	2
	Operated by a special 32-bit communication processor

Tab. 7: Technical data – CAN

USB

Parameter	Description
Standard version	USB 2.0 (Host/Client)
Number of interfaces	1
Mode	Host/Client

Tab. 8: Technical data – USB

eSIM

Parameter	Description
Manufacturer	Sierra Wireless

Tab. 9: Technical data – eSIM

4.5 Hardware

SIM-Karte

Parameter	Description
Format	Micro-SIM
Number of slots	1

Tab. 10: Technical data – SIM card

SD memory card

Parameter	Description
Format	microSD for industrial applications
Operating temperature	-40 °C … +85 °C
Capacity	8 GB

Tab. 11: Technical data – SD card

Real-time clock

Parameter	Description
Supply unit	Gold-Cap power source
Synchronization	Via network or GNSS

Tab. 12: Technical data – real-time clock

4.6 High-frequency components

Component	Manufacturer	Function
WP7607-1-G	Sierra Wireless	LTE and GNSS receiver module
LILY-W132	uBlox	WLAN module with built-in antenna
146200-0001	Molex	2x LTE and GSM antenna
		Connected with the WP7607
2JM013-010/113-UFL	2J antennas	Active GNSS antenna
		Connected with the WP7607

Tab. 13: Technical data – high-frequency components

Maximum output power

Component	HF-Band	Maximum output power
WP7607-1-G	LTE: B1, B3, B7, B8, B20, B28	23 dBm ±1 dB, Class 3
	EGSM 900: 880 MHz … 915 MHz	33 dBm ±1 dB, GMSK mode Power Class 4 27 dBm ±1 dB, 8PSK mode Power Class E2
	DCS 1800: 1,710 MHz … 1,785 MHz	30 dBm ±1 dB; GMSK mode Power Class 1; 26 dBm ±1 dB, 8PSK mode Power Class E2
	GPS: 1,575.42 MHz ±1,023 MHz	No radiated power in the GNSS bands
	GLONASS: 1,597.52 MHz … 1,605.92 MHz	

Component	HF-Band	Maximum output power
LILY-W1322[1]	2.4 GHz, channels 1 … 13 (2.412 GHz … 2.472 GHz)	19 dBm EIRP

Tab. 14: Technical data – high-frequency components

References

[1] The five radiation emission values not related to the wireless transmitter are adapted to ECE-R10.06:2019 CISPR25:2004, ECE-R10.05:2016 CISPR25:2004.

4.7 Sensors

Parameter	Description
Site	GNSS receiver (GPS and GLONASS)
Acceleration	3D acceleration sensor

Tab. 15: Technical data – sensors

4.8 Environmental conditions

Parameter	Description	Standards
Operating temperature	-40 °C … +85 °C	ISO 16750-4
Storage temperature	-40 °C … +85 °C	
Relative humidity	5 % ... 95 %	
Weather resistance	The device is designed for use in all weather conditions and is suitable for outdoor use.	
Salt water resistance	The device is not designed for maritime applications.	

Tab. 16: Environmental conditions

5 Mechanical installation

⚠ WARNING

Health risk due to radio signals

The device contain a radio transceiver. Mounting inside the vehicle cab is not permitted. This requirements refers to mounting situations where there is no metal object between the user and the device (such as the roof or cab wall).

► Maintain a minimum distance of 100 cm between the user and the device.

NOTICE

Functional impairment due to improper paneling

Panels made from conductive materials (e.g. metal) may impair the proper functioning of the device.

► Do not cover the box using conductive materials.

► Do not use steel strappings.

NOTICE

Functional impairment due to interfering signals

Signals form other antennas installed on the machine may interfere with the radio signals of the device.

► Maintain a minimum distance of 100 cm from any other antennas installed on the machine.

5.1 Requirements for installation location and mounting surface

Installation location The JTM-4G-WiFi can either be permanently installed on the machine or on a removable device.

Mounting surface Note the following requirements for the mounting surface:

- The installation surface must be level.

5.2 Mounting orientation

When mounting, observe the permitted and prohibited mounting orientations.

5.2.1 Allowed mounting orientations

Place the JTM-4G-WiFi with its bottom on the flat mounting surface.

Vertical and horizontal installation positions are permitted. Any mounting angle is permitted between vertical and horizontal installation position (0° … 90°).

In vertical installation position, the M12 male connector is pointing down.

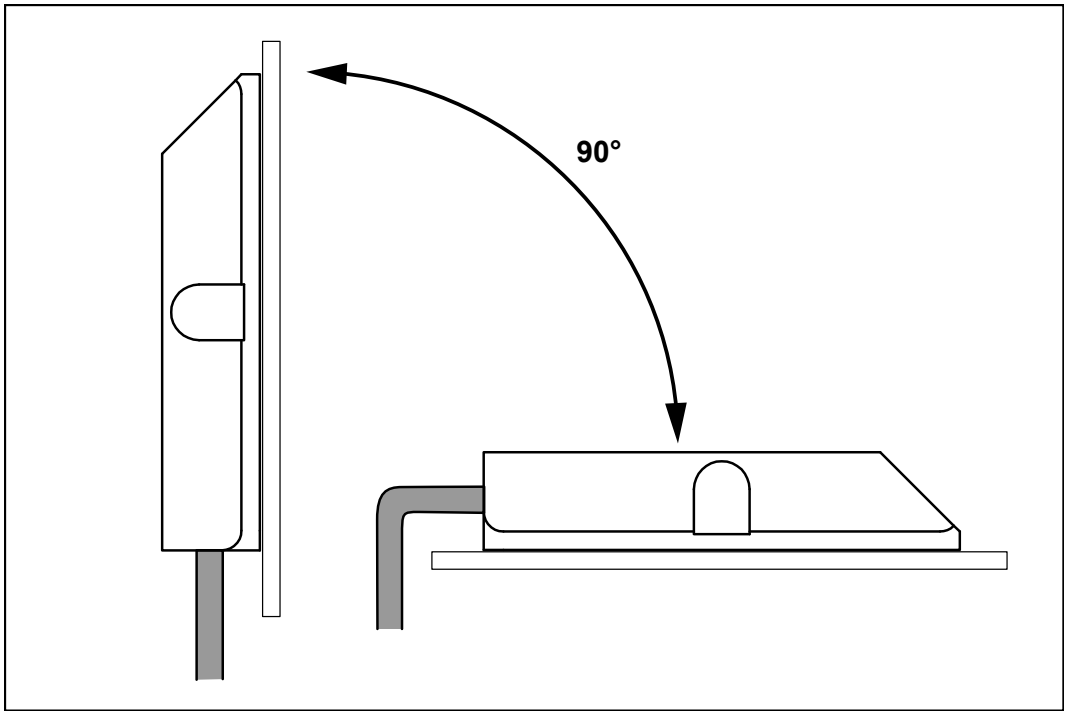


Fig. 5: Allowed mounting orientations

5.2.2 Forbidden mounting orientations

NOTICE

Compliance with degree of protection

Degree of protection IP67 is only ensured for the device if the mating connector of the M12 male connector is plugged in. To achieve degree of protection IP6K9K, the M12 male connector must be covered with an additional rubber protector.

Installation positions with the M12 male connector pointing up are prohibited.

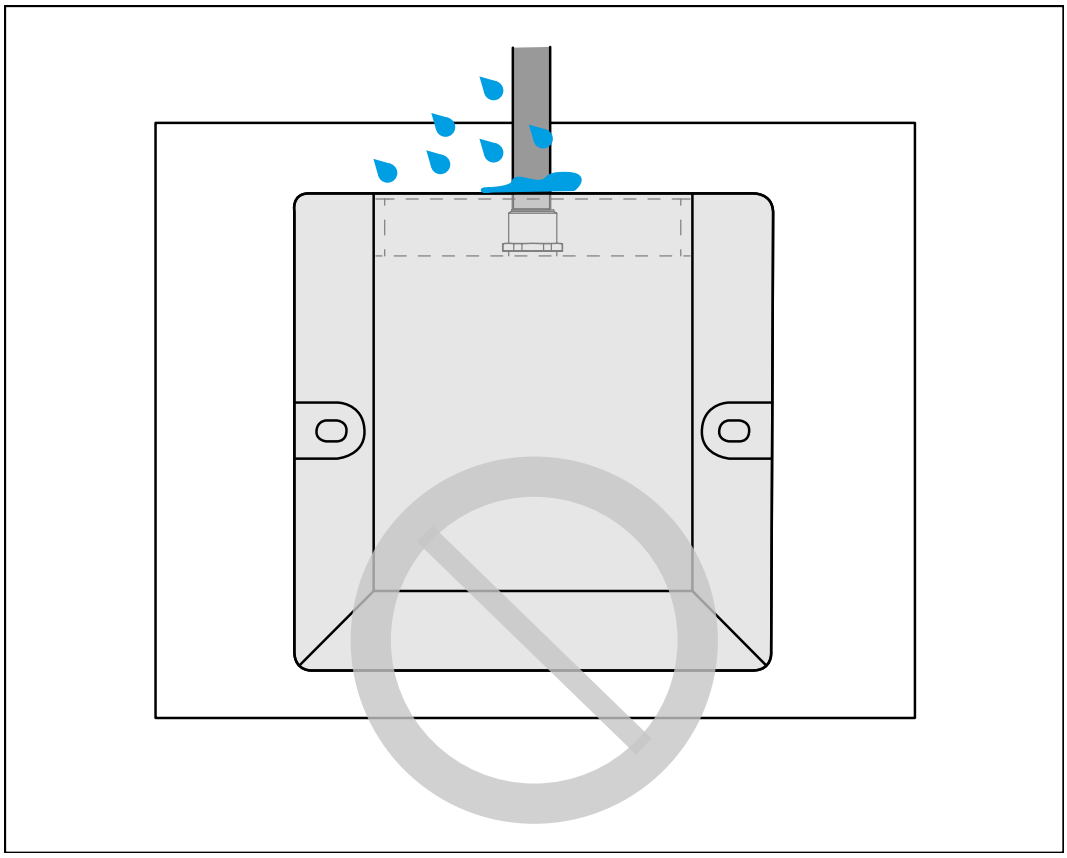


Fig. 6: Forbidden mounting orientation

5.3 Preparing for installation

Fastening material

Installation hardware is not included in the scope of delivery.
Jetter AG recommends the following mounting hardware:

Material	Size	Properties	Quantity
Screws/bolts	M5		2
Spring washers	M5	Max. against unlocking caused by vibration	2

Tab. 17: Fastening material

5.4 Mounting the telemetry module

NOTICE

Compliance with degree of protection

Degree of protection IP67 or IP6K9K is only ensured for the device if the cover is correctly closed. Without a cover, the degree of protection is reduced to IP00.

In mounted state, access to the slots of the Micro-SIM and microSD card is not possible.

Mechanical installation

✓ The cover is correctly closed.

▶ Fasten the JTM-4G-WiFi onto the two fastening lugs. The max. torque is 3 Nm.

6 Electrical connection

6.1 Pin assignment

6.1.1 M12 male connector - power supply, CAN, USB

The JTM-4G-WiFi is equipped with an 8-pin M12 male connector (male, A-coded).

Connect the following to the M12 male connector:

- Power supply of the JTM-4G-WiFi
- CAN interface
- USB data transmission

Recommended cable

You can order a connection cable for the power supply of the JTM-4G-WiFi separately as an Accessories [▶ 42].

Pin assignment

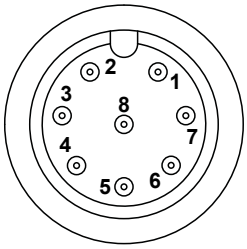


Fig. 7: M12 male connector

Pin	Signal	Connection cable wire color
1	UB+ Power supply +12 V	white
2	GND	brown
3	CAN2-L	green
4	USB_Data+	amber
5	CAN1-L	gray
6	USB_Data-	pink
7	CAN2-H	blue
8	CAN1-H	red

Wiring

Note the following points for the wiring:

- The JTM-4G-WiFi is supplied with power by the machine battery.
- USB pins 4 and 6 must be connected to a shielded, high-frequency and twisted-pair line. The maximum permitted cable length is 5 m.
  NOTICE! For longer cables or if pins 4 and 6 are not used, the connection of these pins must be disconnected.
- The CAN1 and CAN2 pins are signal pairs. Pins 3 and 7 and pins 5 and 8 are twisted-pairs.
- The cable and connector shielding must be connected with GND.

6.2 Slots – Micro-SIM card and microSD card

The JTM-4G-WiFi is equipped with a pre-installed Micro-SIM card and a microSD card. The two cards are interchangeable.

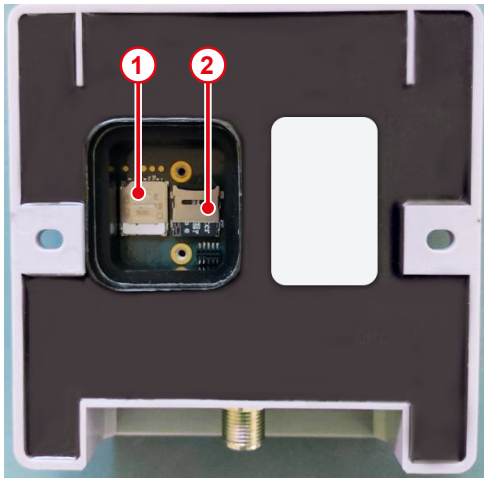


Fig. 8: Slots – Micro-SIM card and microSD card

1	Slot for Micro-SIM
2	Slot for microSD card

6.2.1 Opening and closing the cover

The slots of the Micro-SIM and microSD card are located under the cover in the housing.

NOTICE

Compliance with degree of protection

Degree of protection IP67 or IP6K9K is only ensured for the device if the cover is correctly closed. Without a cover, the degree of protection is reduced to IP00.

In mounted state, access to the slots of the Micro-SIM and microSD card is not possible.

Opening the cover

1. Disconnect the M12 male connector.
2. Remove the device from the machine
3. Turn the device on its back.
4. Loosen the screws (1) of the cover.
   NOTICE! Make certain the sealing rings (2) on the screws are not lost.
   A larger sealing ring (3) is inserted in the edge of the cover.

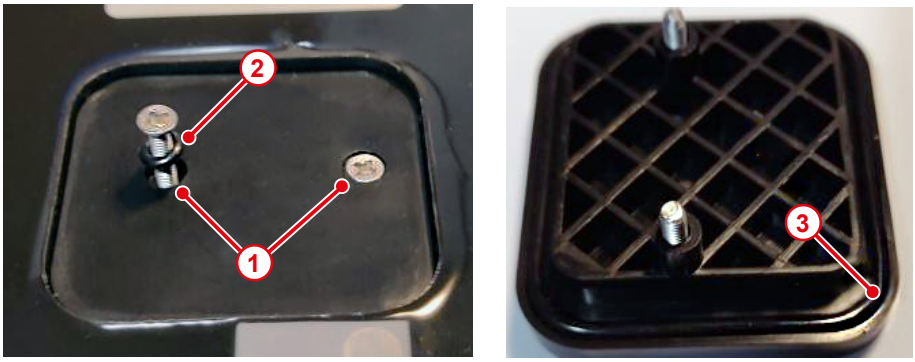


Fig. 9: Opening the cover

Closing the cover

✓ Check the sealing rings (2 and 3) to make sure they are not damaged.
NOTICE! Replace the sealing rings if they are worn.

1. Insert the cover.
NOTICE! The cover is not symmetrical. Make certain the screws are in the correct position. Do not try to fasten the cover in a rotated position.
2. Fasten the screws.

6.2.2 Exchanging the Micro-SIM and microSD card

NOTICE

Dirt and moisture

Exchanging the cards in an unsuitable environment can lead to malfunctions.

► Exchange the cards only in a dry and dust-free environment.

✓ The cover is open.

1. Unlock the card holder.
2. Exchange the card.
3. Fold the cover of the card holder shut.
4. Check to make sure the cover of the card holder is locked.

6.3 Commissioning

► Connect the JTM-4G-WiFi to a DC 12 V … 24 V power source.

⇨ When the device is supplied with power, the LED ⏻ is lit.

7 Configuration

7.1 Setting up a GNSS connection

✓ The JTM-4G-WiFi is connected with a power source.

✓ The LED is lit.

► Conduct a cold start synchronization lasting several minutes with a direct view of the GNSS satellites.

⇨ The LED is lit if the position information of the GNSS receiver can be accessed.

7.2 Setting up a mobile wireless network connection

The JTM-4G-WiFi is equipped with a pre-installed Micro-SIM card and automatically sets up a connection with the mobile wireless network. Then the connection to the cloud server starts via the VPN channel. The LED is lit if the identification and connection were successful.

7.3 Access data label

An individual access data label is enclosed with each JTM-4G-WiFi.

The access data label contains the access data required for the connection with the Widiin cloud and the WiFi.

ⓘ INFO

Affixing the access data label in the driver's cab

For fast access affix the access data label in the driver's cab.

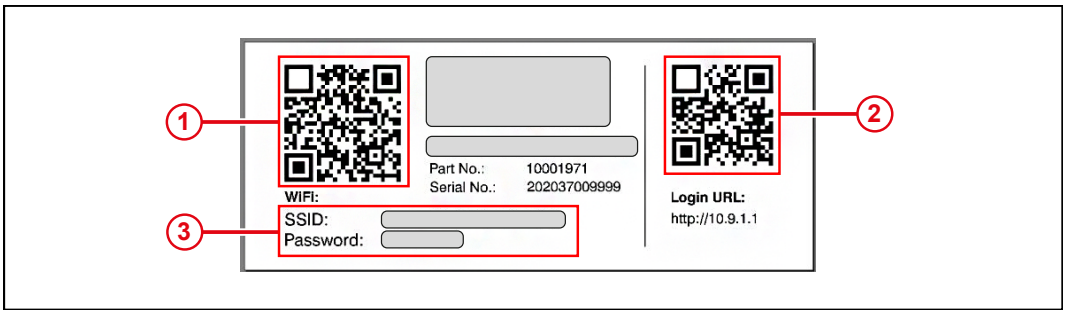


Fig. 10: Access data label

1	QR code for the automatic WiFi connection
2	QR code for calling the web interface automatically
3	Access data for the WiFi connection; The password is also used for the connection with the Widiin cloud.

Lost access data label

If the access data label is lost please contact Customer Service [▸ 41].

7.4 Setting up a WiFi connection

The JTM-4G-WiFi is accessible locally via WiFi and starts as a WiFi hotspot. A connection with the mobile wireless network is not required in this case.

WiFi hotspot mode

An integrated DHCP server is available to clients. WiFi client operation is also possible from a hotspot defined by the user. WiFi hotspot mode manages max. 8 clients simultaneously.

Logging in

To log in you need the SSID and the password, both of which are indicated on the access data label [▸ 23].

ⓘ INFO

Automatic WiFi connection

To set up the WiFi connection automatically, scan the left QR code on the access data label. Then a password does not need to be entered.

✓ The LEDs ⏻ and 📶 of the JTM-4G-WiFi are lit.

1. Switch to the network & Internet settings of your PC or mobile terminal device.
2. Choose the JTM-4G-WiFi from the displayed list of networks. The name of the network corresponds to the SSID on the access data label.
3. Enter the password.

⇨ Your PC or mobile terminal device is connected with the JTM-4G-WiFi.

7.5 Web interface

The device has a web interface with a graphical user interface. You can access the web interface with a web browser. The web interface consists of several pages.

Opening the web interface

✓ A WiFi connection to the JTM-4G-WiFi has been set up.

1. Open page *http://10.9.1.1* in a web browser.
2. The web interface opens on the Info page.

Info	
Identification	
Device	[redacted]
SerialNumber	[redacted]
IMEI	[redacted]
ICCID	[redacted]
MSISDN	
Connection	
Network operator	Things Mobile
Current RAT	LTE
Signal	4
Trafic	18.6 KByte
Environment	
Temperature	35 °C
Supply voltage	12245 mV
Times	
Uptime	0 day 0:12:06
Device	Tue Aug 30 09:21:59 +02 2022
Work hour	
Position	
Latitude,Longitude	not available
Horizontal accuracy	not available
Altitude	not available
Vertical accuracy	not available

Fig. 11: Web interface: Info page

- The Info page provides information about the JTM-4G-WiFi.
- The System page provides information about versions, the network and USB.
- On the Control page you can reboot the system, set up WiFi hotspots and set the APN of the SIM card.

7.6 Managing telemetry modules in the Widiin cloud

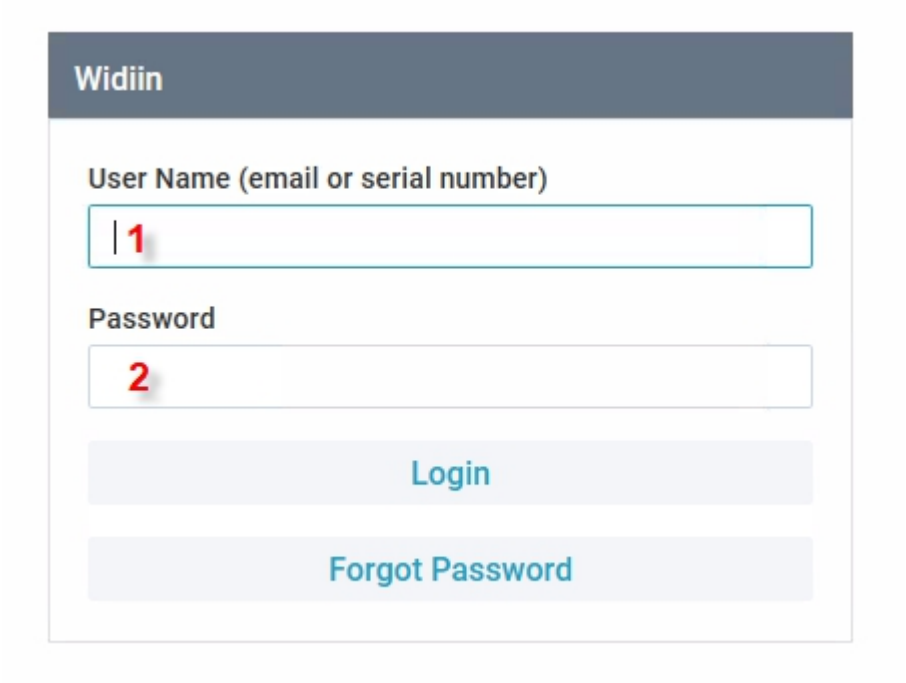
In the Widiin cloud *https://widiin.com/* you can manage and configure one or more JTM-4G-WiFis.

7.6.1 Setting up a Widiin cloud connection

Logging in for the first time

To be able to use the Widiin cloud, you need access data. The first time you log in, use the data on the Access data label [▶ 23] as access data.

1. To open the Widiin cloud, use the link *https://widiin.com* in a web browser.
   ⇨ A login mask opens.



2. Enter the serial number (1) and the WiFi password (2).

⇨ The Overview page opens.

⇨ Now you can manage the JTM-4G-WiFi directly or create a user profile.

ⓘ INFO

Login with the access data does not work

When you log in with the access data of the module, you are managing the JTM-4G-WiFi directly. If login with the access data does not work, it may be that the module has been assigned to a certain user (see User and access management [▶ 29]).

7.6.2 User interface of the Widiin cloud

The user interface of the Widiin cloud will differ depending on whether you logged in with the access data of a JTM-4G-WiFi or as a user. Certain menus are only visible to logged in users.

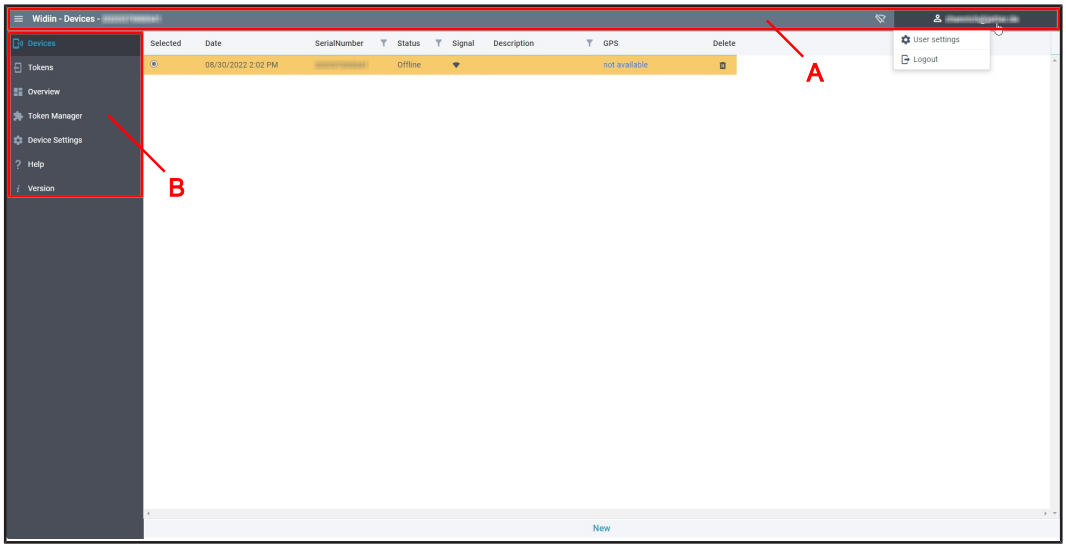


Fig. 12: User interface of the Widiin cloud

Status bar (A)

The following buttons and details are shown in the upper status bar (A):

- **1** – Click on this button to expand the menu bar.
- **2** – Serial number of the currently selected JTM-4G-WiFi
- **3** – Connection status
- **4** – Logged in user or logged in JTM-4G-WiFi
  When you click on the button:
  - User settings (only as user): In the user settings you can manage your user profile.
  - Device Settings (only if you are managing the module directly): In the device settings you can create a new user profile and more.
  - Logout: Logout

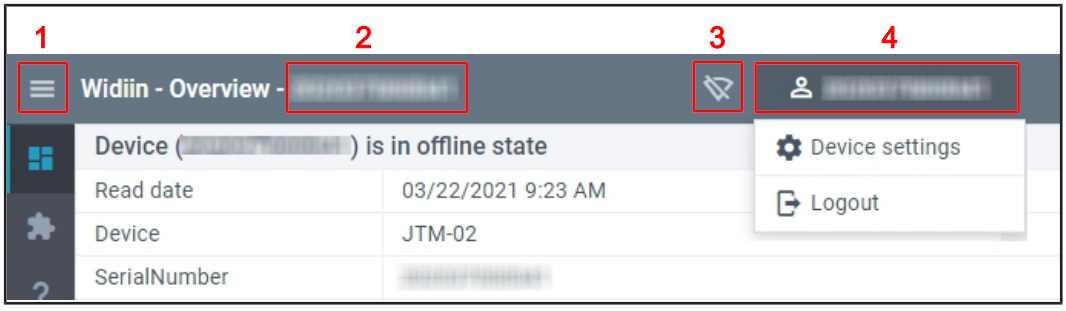


Fig. 13: Status bar

Menu bar (B)

The available menus are displayed in the menu bar (B):

- Devices (only as user): Overview of all JTM-4G-WiFis assigned to the user
- Tokens (only as user): Overview of all tokens assigned to the user
- Overview: Overview of the transmission data of the selected JTM-4G-WiFi
- Token Manager: In the Token Manager you can manage access tokens for the selected JTM-4G-WiFi.
- Device Settings (only as user): Device settings
- Help: Help page
- Version: Software version information

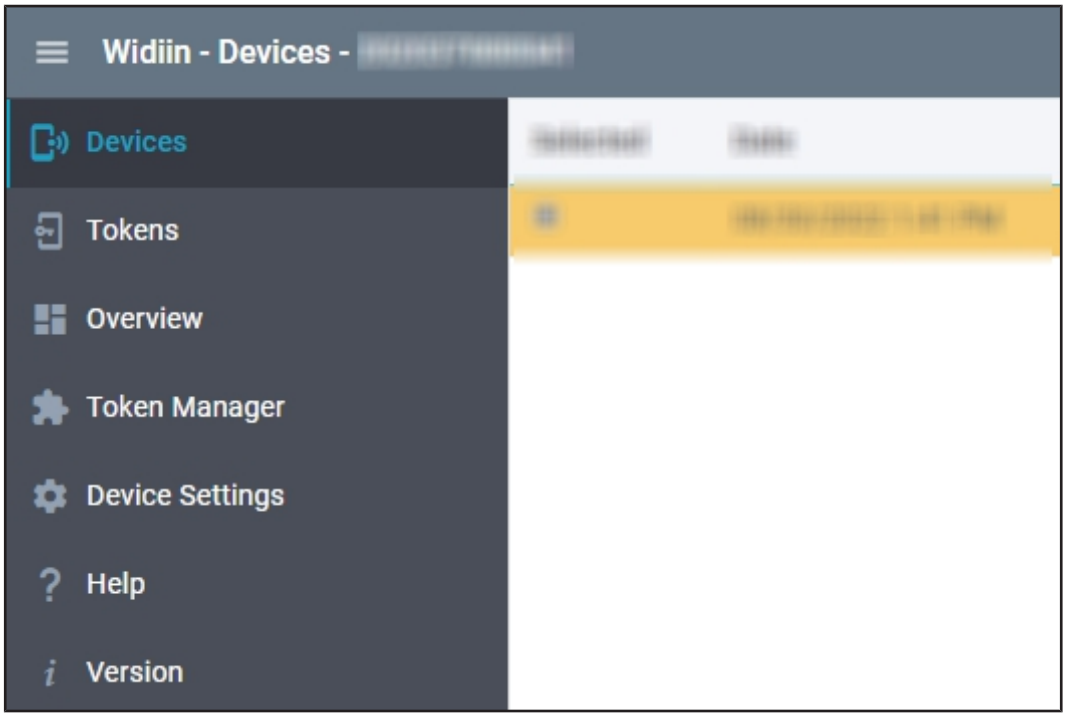


Fig. 14: Menu Bar

7.6.3 User and access management

In the Widiin cloud you can manage the JTM-4G-WiFi directly or create a user profile in which the JTM-4G-WiFi is managed.

Direct management

- Login with the access data on the access data label
- Anyone who has the access data can create and manage access tokens for the module.

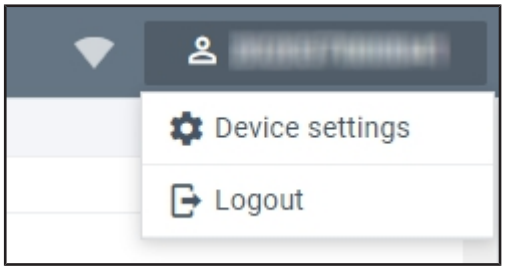
Management in a user profile

- Login with personal access data
- Only the user can create and manage access tokens for the module.
- A user can manage multiple modules in one profile.

Creating a new user

✓ You have logged in with the access data of a JTM-4G-WiFi.

1. Select User > Device settings.



2. In the Profile area enter the desired data and confirm with Save.
   ⇨ Widiin sends an e-mail to the e-mail address that was entered for verification.
3. Open the link from the e-mail.
4. Log in under *https://www.widiin.com* with your new access data.

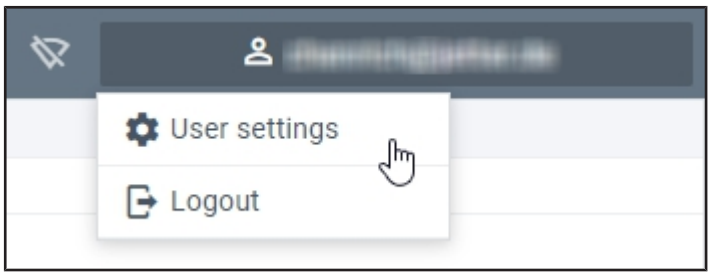
⇨ The Devices view opens.

⇨ You are created as a managing user for the JTM-4G-WiFi.

Changing the user password

✓ You are logged in with your access data.

1. Select User > User settings.



2. In the Profile area enter the desired data and confirm with Change password.

⇨ Your password has been changed.

7.6.4 Adding additional telemetry modules

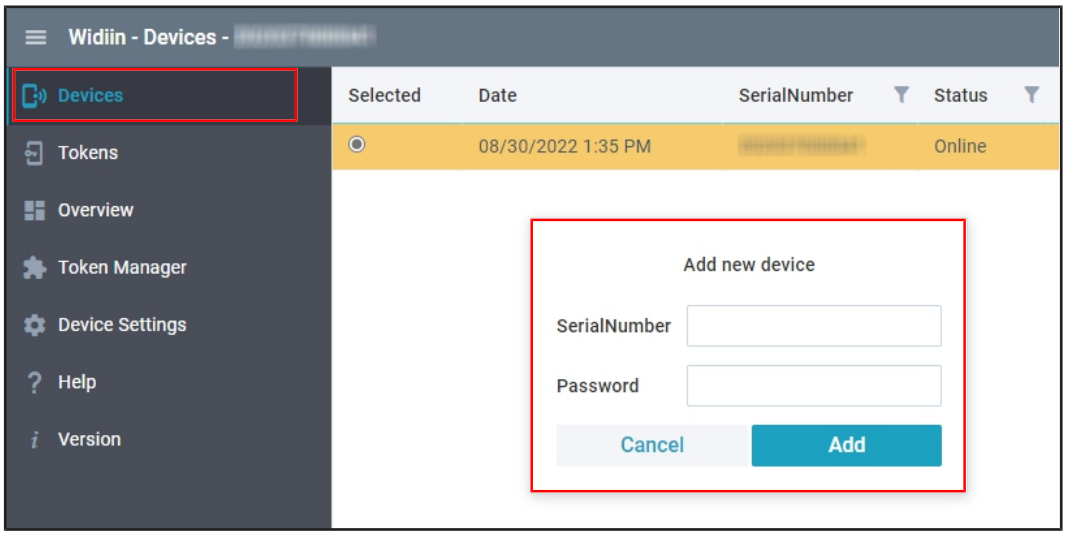
You can add additional telemetry modules to your user profile in the Devices view.

✓ You are logged in as a user.

✓ You are in the Devices view.

1. Select New.

   ⇨ The Add new device window opens.



2. Enter the serial number and password of the JTM-4G-WiFi and confirm with Add. The details can be found on the enclosed Access data label [▸ 23].

⇨ The JTM-4G-WiFi has been added and appears in the device list.

7.6.5 Creating and managing access tokens

To set up a connection to a JTM-4G-WiFi, you need an access token.

The Token Manager view shows a list of all existing access tokens. Here you can delete access tokens, declare them invalid or send them again.

Rights

As the managing user of a JTM-4G-WiFi, you are the sole person authorized to create access tokens for this telemetry module.

If the JTM-4G-WiFi has not been assigned to any specific user, there are no restrictions on creating access tokens.

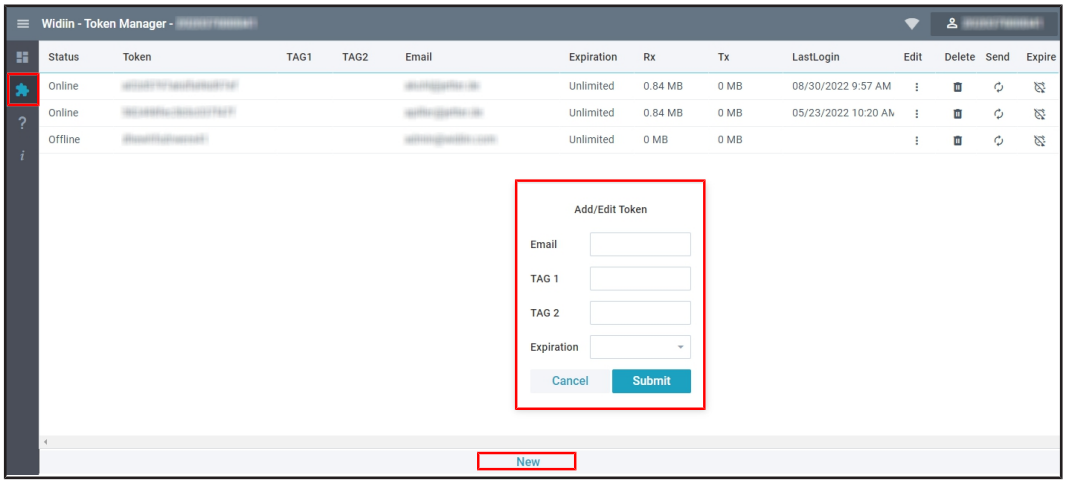
Creating access tokens

✓ You have the rights to create an access token for the JTM-4G-WiFi.

1. Select the desired JTM-4G-WiFi in the Devices view.
   If you are managing the JTM-4G-WiFi directly, this step is not required.
2. Switch to the Token Manager view.
3. Select New.
   ⇨ The Add/Edit Token form opens.
4. Enter the desired data. Entries in fields TAG 1 and TAG 2 are optional.
5. In the Expiration field select the period of time you want the access token to be valid for.
6. To send the form, select Submit.

⇨ The access token is created and appears in the Token Manager.

⇨ The access data is sent to the specified e-mail address.



7.7 Setting up a connection to a telemetry module via access tokens

The connection to a telemetry module is set up by the **JTM Link** application (version 1.0.0.12) of Jetter AG.

You can either create an access token yourself in the Widiin cloud or receive it from another user. In either case you will receive an e-mail from Widiin containing the access token.

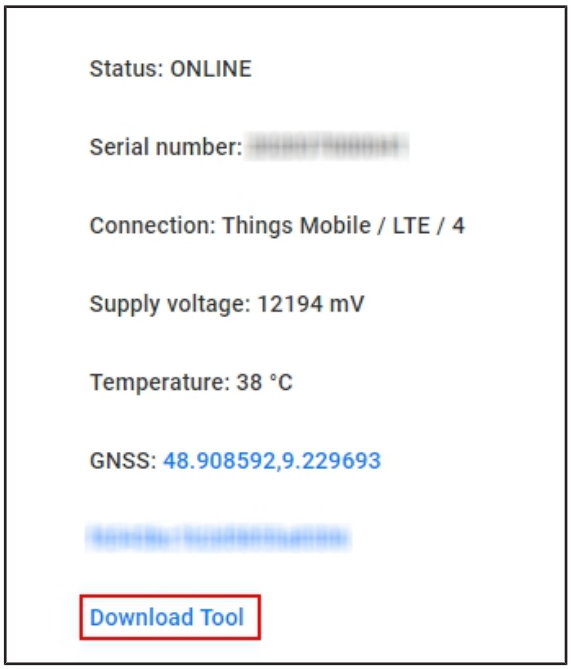
Access token via e-mail

✓ You have received an e-mail from Widiin containing an access token.

1. Select the link JTM Link from the e-mail.

⇨ A website opens. The website contains basic information about the telemetry module.

2. If the **JTM Link** application is not installed yet, select Download Tool.



⇨ You can download the installation file from the website. Admin rights are required for the installation.

⇨ If the **JTM Link** application is already installed, the application opens directly. A connection to the JTM-4G-WiFi has been set up.

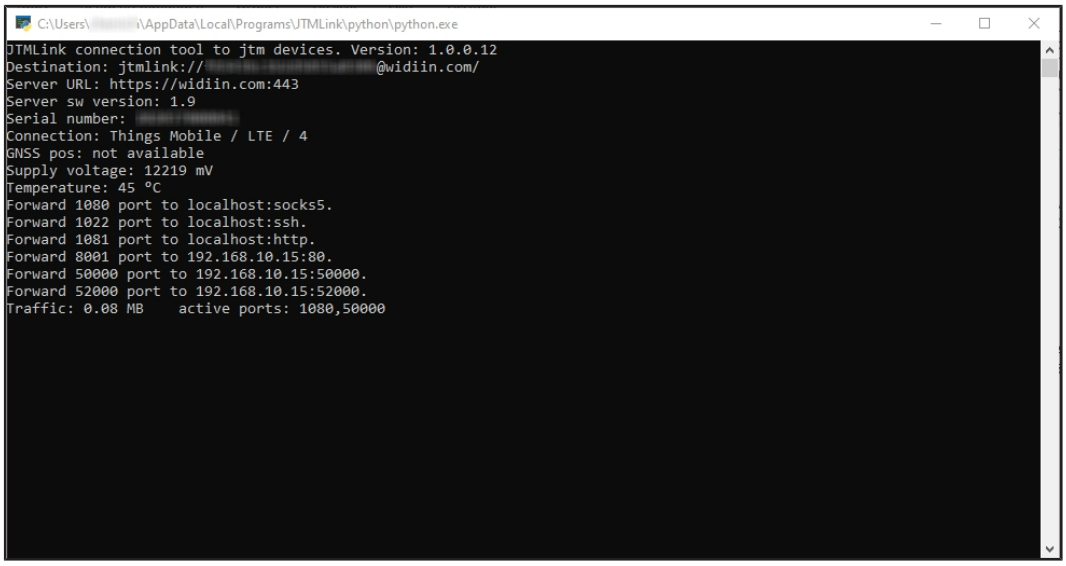


Fig. 15: JTM Link application

Access token via Widiin cloud

As a user you can find an overview of your access tokens in the Tokens view in the Widiin cloud.

✓ You are logged in as a user in the Widiin cloud.

✓ You have generated an access token in the Token Manager view or an access token has been assigned to you.

✓ The **JTM Link** application is installed.

1. Switch to the Tokens view.
2. Click on the desired access token in the list.

⇨ The **JTM Link** application opens. The connection to the JTM-4G-WiFi has been set up.

8 Setting up remote access to a controller

In combination with accessory module JXM-TE-E01 of Jetter AG, you can set up remote access to a controller via JetSym or FTP.

8.1 Sample configuration

Remote access to a controller is based on the following sample configuration:

Hardware

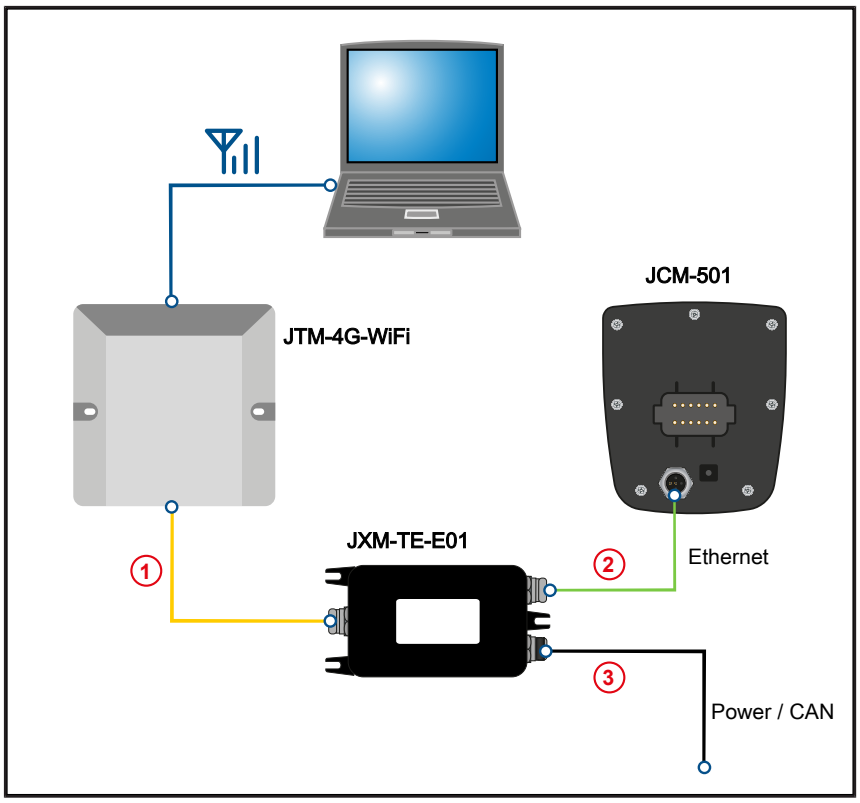


Fig. 16: Sample configuration

1	Cable KAYM_ETH-O2-0300
2	M12 Ethernet cable
3	Power/CAN cable To connect to a DC-12-V power source (min. 1 A)

The devices and cables listed here can be found in the Accessories [▶ 42] section.

Software

Application	Version	Developer
Windows	7, 10	Microsoft
JTM Link	1.0.0.12	Jetter AG
JetSym	5.6.4	Jetter AG
Total Commander (FTP-Client)	10.00	https://www.gishler.com/

Tab. 18: Software

8.2 Access via JetSym

Prerequisites

To be able to access a controller via JetSym, a connection must be set up to the JTM-4G-WiFi that is connected to the controller (see section Setting up a connection to a telemetry module via access tokens [▶ 33]).

Adjustment to the IP address

Remote access is identical to access to a controller via Ethernet cable. Simply adapt the IP address in JetSym.

► Instead of the usual IP address `192.168.10.15` use IP address `127.0.0.1`.

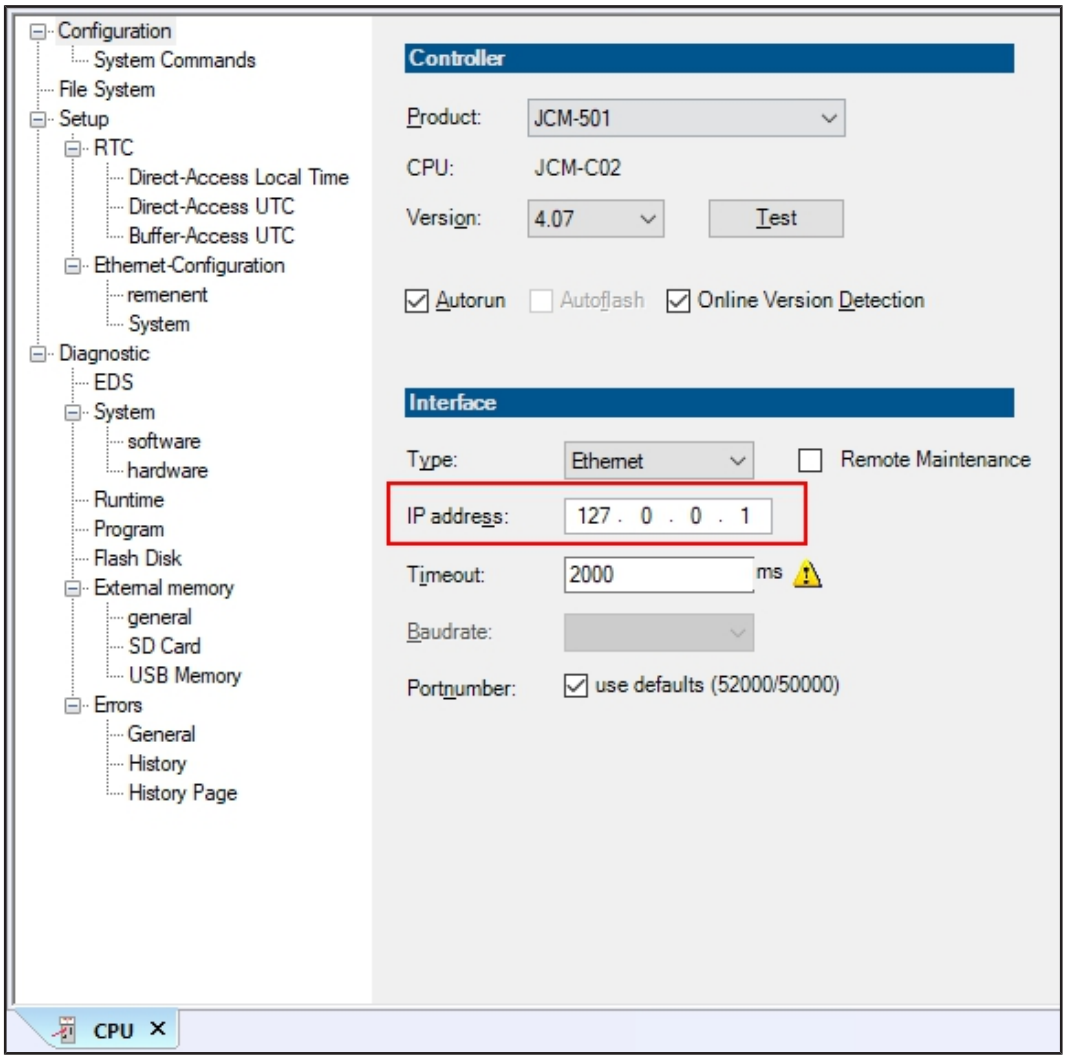


Fig. 17: Adjustment to the IP address in JetSym

⇨ After the IP address has been adjusted there is a connection between JetSym and the controller. You can now use JetSym as usual.

ⓘ INFO

Further information

For more information on this subject, refer to the JetSym Online Help.

8.3 Access via FTP client

With the **Total Commander** application you can remotely access the file system of the controller to which the JTM-4G-WiFi is controller.

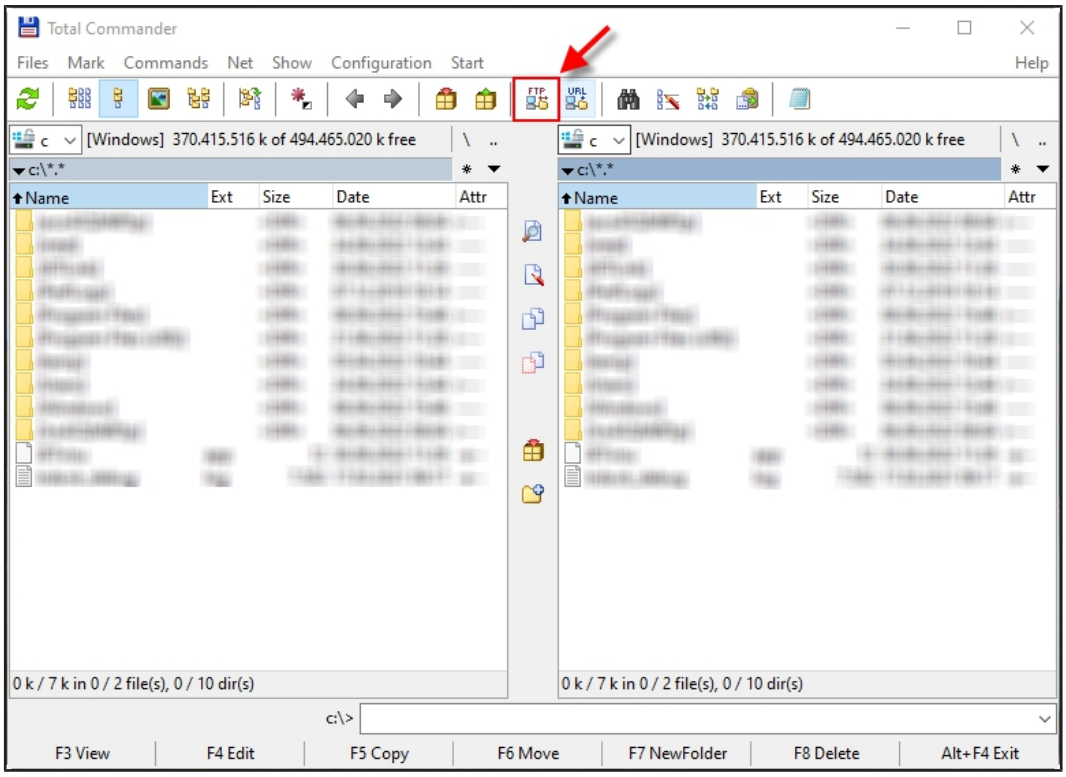
Prerequisites

To be able to access a controller via FTP client, a connection must be set up to the JTM-4G-WiFi to which the controller is connected (see section Setting up a connection to a telemetry module via access tokens [▶ 33]).

Setting up a connection

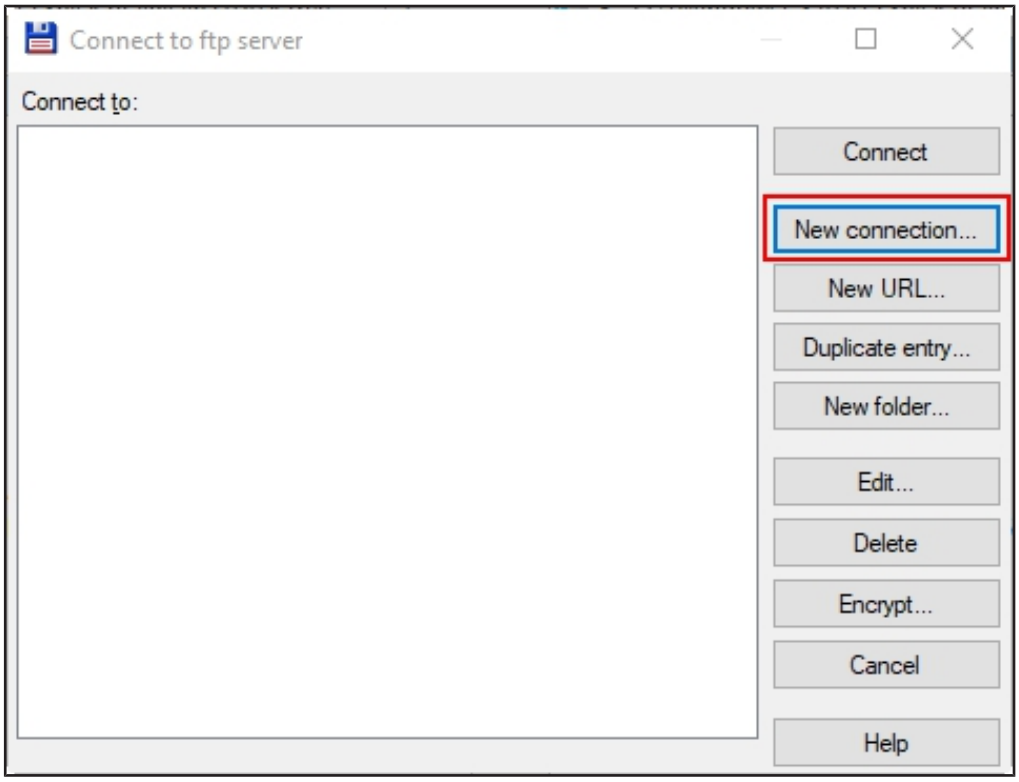
✓ There is a connection to the JTM-4G-WiFi.

1. Open the **Total Commander** application.
2. In the toolbar select FTP.



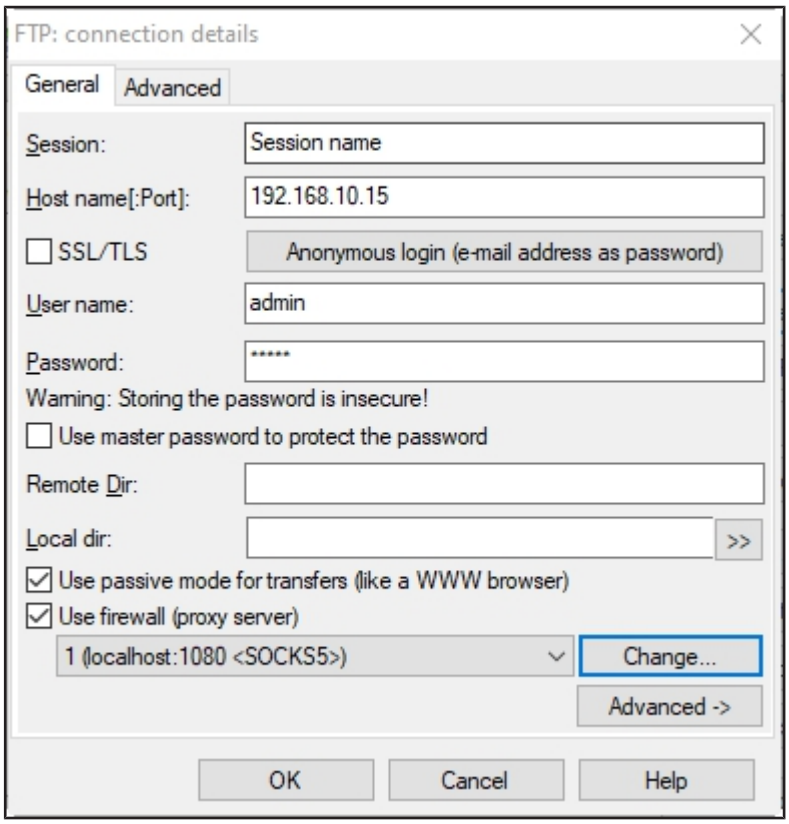
⇨ The Connect to FTP server window opens.

3. To create a new connection, select New connection….



⇨ The FTP: connection details window opens.

4. Make the following settings and confirm with OK.
You can select any Session name you want.
User name: *admin* Password: *admin*



⇨ The FTP connection between **Total Commander** and the controller is set up.

9 Maintenance

This device is maintenance-free.
Therefore, for the operation of the device no inspection or maintenance is required.

9.1 Repairs

Defective components could cause dangerous malfunctions and could compromise safety.
Only the manufacturer is allowed to repair the device.
It is forbidden to open the device.

Changes to the device

Modifications and alterations to the device and its functions are not allowed. In the case of modifications to the device, any liability is excluded.

The original parts are specifically designed for the device. Parts and equipment from other manufacturers must, therefore, not be used.

Any liability for any damages resulting from the use of non-original parts and equipment is excluded.

9.2 Return and disposal

How to dispose of waste equipment

Return your Jetter AG product to us for proper disposal. Visit our *homepage* for detailed information and to download the required Returns form.

Meaning of the WEEE icon

Fig. 18: WEEE icon – crossed-out trash can

Applicable local environmental directives and regulations must be complied with. The product is waste electronic equipment and must be disposed of by a certified waste management facility. Do not dispose of the product with normal household waste.

Personal data

Customers are responsible for deleting personal data from waste equipment prior to its disposal.

9.3 Storage and shipment

Storage

When storing the device observe the environmental conditions given in chapter “Technical specifications”.

Shipment and packaging

The device contains electrostatically sensitive components which can be damaged if not handled properly. Damages to the device may impair its reliability.

To protect the device from impact or shock, it must be shipped in its original packaging, or in an appropriate protective ESD packaging.
In case of damaged packaging inspect the device for any visible damage, and inform your freight forwarder and the Jetter AG of the damage caused during shipment. If the device is damaged or has been dropped, it is strictly forbidden to use it.

10 Service

10.1 Customer service

Should you have any questions, suggestions, or problems, please don't hesitate to contact our service representatives. To contact them, please call our technical hotline or use the contact form on our homepage:

Technical hotline | Jetter - We automate your success.

You are also welcome to send an e-mail to our technical hotline:

hotline@jetter.de

Please supply the following information when contacting our technical hotline:

- Hardware revision and serial number
  For the hardware revision and serial number of your product, please refer to the nameplate.
- OS version
  The operating system version can be found in the Widiin cloud.

11 Spare parts and accessories

NOTICE

Inadequate accessories might cause damage to the product

Parts and equipment from other manufacturers might impede the function of the device and cause damage to the product.

► Only use accessories recommended by Jetter AG.

11.1 Accessories

ⓘ INFO

Ordering accessories

The accessories are not part of the scope of delivery.

Suitable accessories can be obtained from Jetter AG.

Accessories	Item number
KAY_JXM-JVM-104-0500 Power supply cable of the telemetry module	60882261
JXM-TE-E01 Ethernet module	60885237
KAYM_ETH-O2-0300 Cable from telemetry module to Ethernet module	60885237
M12 Ethernet cable	60885976
Power/CAN cable	60882261

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Glossary

2G

2G (GSM) is an abbreviation for the second generation of the mobile wireless standard.

4G

4G (LTE) is an abbreviation for the fourth generation of broadband mobile wireless technology.

GNSS

A global navigation satellite system or GNSS is a system for position determination and navigation on the ground and in the air by receiving signals from navigation satellites and pseudolites.

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