



GH5200

Tracker for lone worker protection

Quick Manual
v1.0

Table of Contents

Know your device	3
Set up your device	4
How to insert Micro-SIM card and connect the battery.....	4
PC Connection (Windows).....	5
How to install USB drivers (Windows).....	5
Configuration (Windows)	5
Quick SMS configuration	7
LED indication scenarios	8
Characteristics	9
Basic characteristics	9
Safety information	10
Certification and Approvals	11
Warranty	12
Warranty Disclaimer	12

Know your device

Top view

Bottom view (without cover)

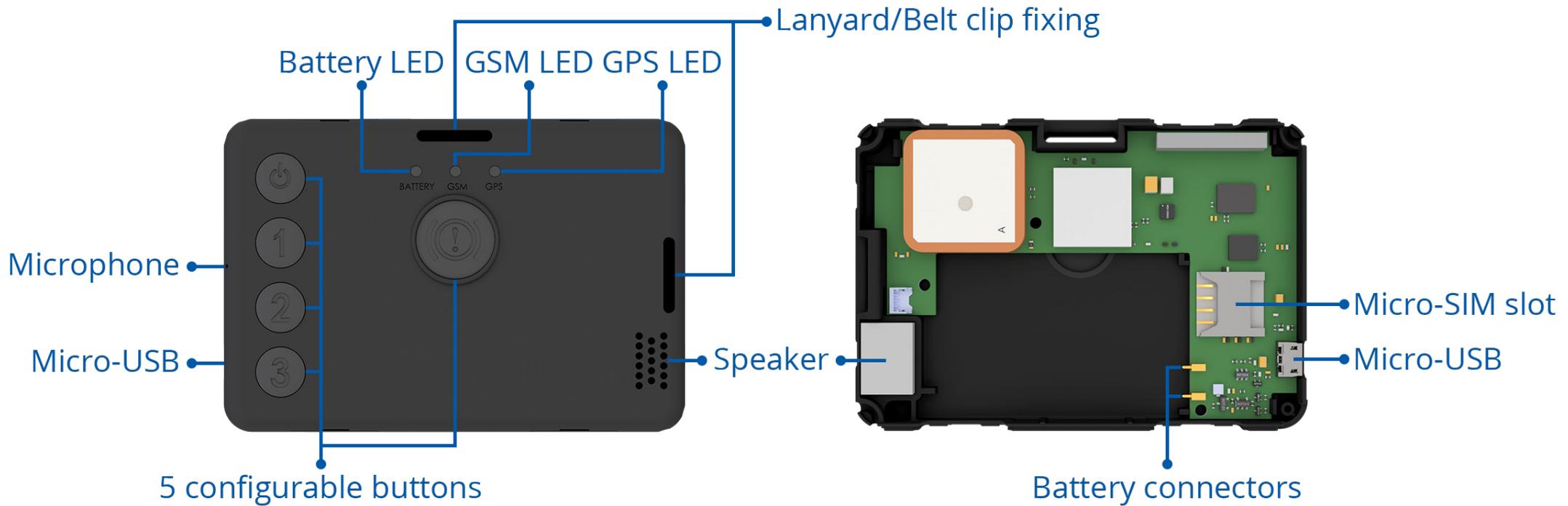


Figure 1 GH5200 device view

Set up your device

How to insert Micro-SIM card and connect the battery

1. Remove the **cover**.
2. Insert **Micro-SIM** card as shown with **PIN request disabled**. Make sure that Micro-SIM card **cut-off corner** is pointing forward to slot.
3. Insert the **battery** as shown to device. Position the battery in place where it does not obstruct other components.
4. Reattach the **cover** and tighten the **screw**.

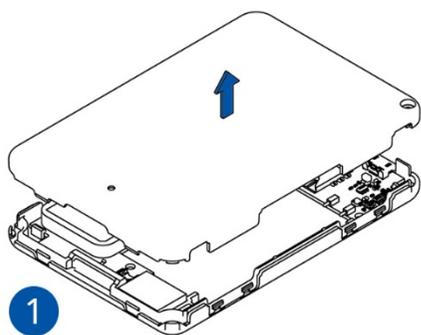


Figure 2 Remove the cover

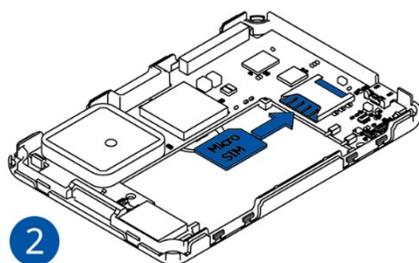


Figure 3 Insert Micro-SIM card

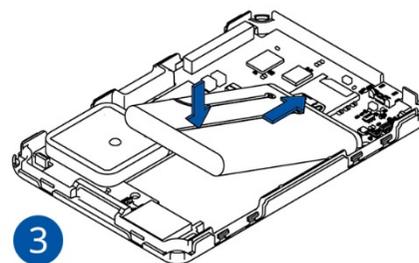


Figure 4 Insert the battery

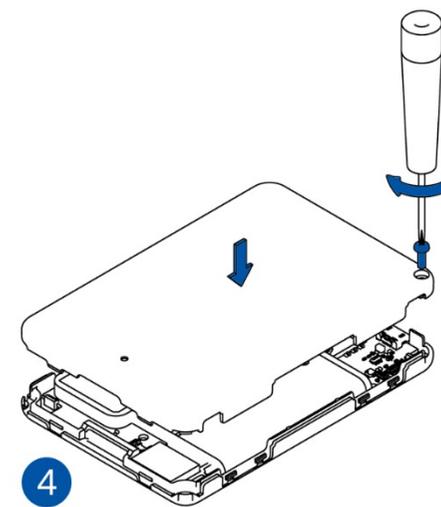


Figure 5 Reattach the cover and tighten the screw

PC Connection (Windows)

1. Turn on your device by holding the power button for around 7 seconds.
2. Connect device to computer using **Micro-USB cable** or **Bluetooth** connection:
 - Using **Micro-USB cable**
 - You will need to install USB drivers, see [“How to install USB drivers \(Windows\)”](#)
 - Using **Bluetooth**
 - GH5200 Bluetooth is enabled by default. Turn on **Bluetooth** on your PC, then select **Add Bluetooth or other device > Bluetooth**. Choose your device named – **“GH5200_last_7_imei_digits”**, without **LE** in the end. Enter default password **5555**, press **Connect** and then select **Done**.
3. You are now ready to use the device on your computer.

How to install USB drivers (Windows)

1. Please download COM port drivers from [here](#).
2. Extract and run **TeltonikaCOMDriver.exe**.
3. Click **Next** in driver installation window.
4. In the following window click **Install** button.

Setup will continue installing the driver and eventually the confirmation window will appear. Click **Finish** to complete the setup.

Configuration (Windows)

At first GH5200 device will have default factory settings set. These settings should be changed according to the user's needs. Main configuration can be performed via **Teltonika Configurator** software. Configurator operates on **Microsoft Windows OS** and uses prerequisite **MS .NET Framework**. Make sure you have the correct version installed.

Table 1 MS .NET requirements

MS.NET REQUIREMENTS

Operating system	MS .NET Framework version	Version	Links
Windows Vista Windows 7 Windows 8.1 Windows 10	MS .NET Framework 4.6.2	32 and 64 bit	www.microsoft.com

Downloaded **Configurator** will be in compressed archive. Extract it and launch **Configurator.exe**. After launch software language can be changed by clicking  in the right bottom corner (**Figure 6 Language selection**).

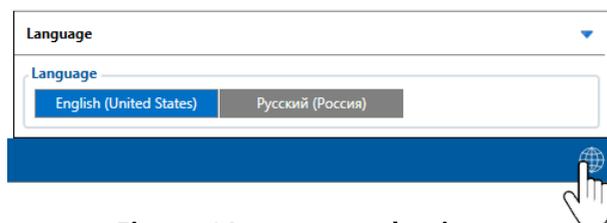


Figure 6 Language selection

Configuration process begins by pressing on connected device (Figure 10 Device connected via USB).



Figure 7 Device connected via USB

After connection to Configurator **Status window** will be displayed (Figure 8 Configurator Status window).

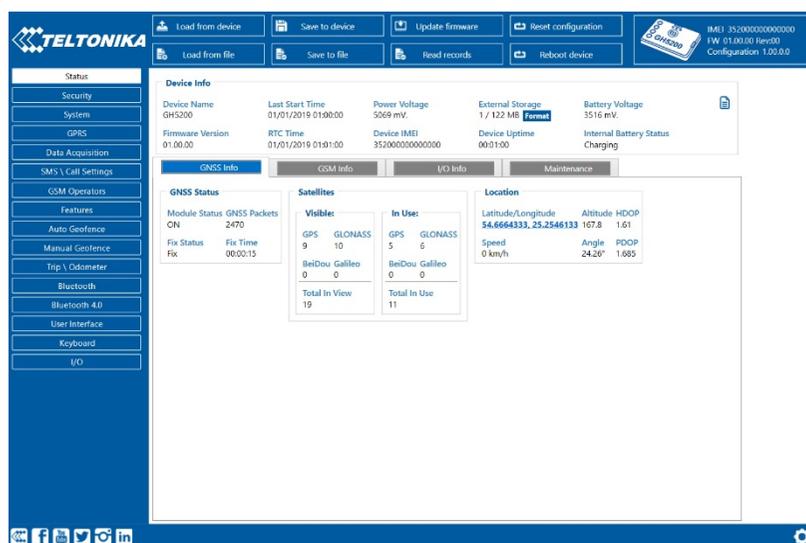


Figure 8 Configurator Status window

Various **Status window** tabs display information about **GNSS, GSM, I/O, Maintenance** and etc. GH5200 has one user editable profile, which can be loaded and saved to the device. After any modification of configuration the changes need to be saved to device using **Save to device** button. Main buttons offer following functionality:

1. **Load from device** – loads configuration from device.
2. **Save to device** – saves configuration to device.
3. **Load from file** – loads configuration from file.
4. **Save to file** – saves configuration to file.
5. **Update firmware** – updates firmware on device.
6. **Read records** – reads records from the device.
7. **Reboot device** – restarts device.
8. **Reset configuration** – sets device configuration to default.

Most important configurator section is **GPRS** – where all your server and **GPRS settings** can be configured and **Data Acquisition** – where data acquiring parameters can be configured.

Quick SMS configuration

Default configuration has optimal parameters present to ensure best performance of track quality and data usage.

Quickly set up your device by sending this SMS command to it:

```
" setparam 2001:APN;2002:APN_username;2003:APN_password;2004:Domain;2005:Port;2006;0"
```

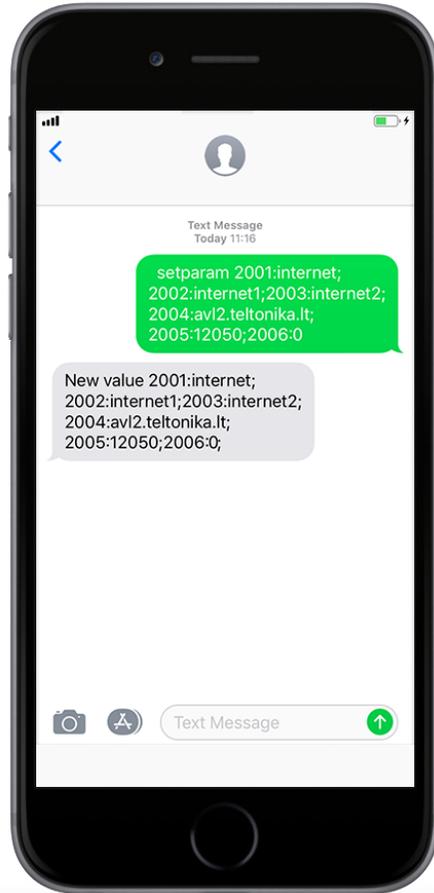
Note: Before SMS text, two space symbols should be inserted.

GPRS settings:

- 2001 – APN
- 2002 – APN username (if there are no APN username, empty field should be left)
- 2003 – APN password (if there are no APN password, empty field should be left)

Server settings:

- 2004 – Domain
- 2005 – Port
- 2006 – Data sending protocol (0 – TCP, 1 – UDP)



Default configuration settings

Movement detection:



Movement will be detected by accelerometer

Device makes a record **On Moving** if one of these events happen:



300 seconds passes



Device turns 10 degrees



Traveled distance is more than 100 meters



Speed difference between last coordinate and current position is greater than 10 km/h

Device makes a record **On Stop** if:



1 hour passes while device is stationary

Records sending to server:



If device has made a record it is sent to the server every 120 seconds

After successful SMS configuration, GH5200 device will **synchronize time** and **update records** to **configured server**. Time intervals and default I/O elements can be changed by using **Teltonika Configurator** or **SMS parameters**.

LED indication scenarios

Table 3 LED indication scenarios

SCENARIO	MEANING
GSM INDICATION	
GSM Error	SIM is not inserted, failed to connect to GSM operator or GSM signal is being jammed
GSM Registering	Device is trying to register to GSM network
SMS Send/Receive	SMS is received or sent
Incoming Call	Device notices incoming call
Call Active	A call is in progress
Outgoing Call	Device notices outgoing call
Incoming Call	Device notices incoming call
GNSS INDICATION	
No GNSS Fix	Device searches for valid GNSS fix
GNSS Fix	Device has valid GNSS fix
EVENT INDICATION	
Event	Eventual record is saved
Panic Event	Panic record is saved
Device Off	Device is turning off
Device On	Device is turning on
Pre Alarm	Indication when Man-down functionality starts counting timeout till event
Man-down	Man-down is active
I Am Alive	Periodical indication that device is on
Sleep Mode	Device is in sleep mode
Key Pressed	Indication when one of device's buttons is pressed

Keyboard Action Activated	A button was triggered with configured function to activate functionality
Keyboard Action Deactivated	A button was triggered with configured function to deactivate functionality

BATTERY INDICATION

Charging	Device is charging
Fully Charged	Device is fully charged
Charging Error	An error occurred while charging
Battery Low	Device battery is low

Default configuration LED indications

Table 4 Default configuration LED indications

SCENARIO	LED, COLOR & ADDITIONAL INDICATION
GSM Error	GSM
Call Active	GSM
No GPS Fix	GNSS
GPS Fix	GNSS
Device Off	Battery, Vibration
Device On	Battery, Vibration
I Am Alive	GNSS
Charging	Battery
Fully Charged	Battery
Charging Error	Battery
Battery Low	Battery

Note! Two LED colors are available – **Green** and **Red**. Indications are fully customizable depending on the user needs.

Characteristics

Basic characteristics

Table 5 Basic characteristics

MODULE	
Name	TM2500
Technology	GSM, GPRS, GPS, BLUETOOTH
GNSS	
GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS
Receiver	33 channel
Tracking sensitivity	-165 dBm
Accuracy	< 3 m
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s
CELLULAR	
Technology	GSM
2G bands	Quad-band 850 / 900 / 1800 / 1900 MHz
Data transfer	GPRS Multi-Slot Class 12 (up to 240 kbps), GPRS Mobile Station Class B
Data support	SMS (text/data)
POWER	
Charging voltage	5V DC with over-voltage protection
Battery	1050 mAh Li-Ion battery

BLUETOOTH

Specification	4.0 + LE
Supported peripherals	Headset

INTERFACE

Configurable buttons	5
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	3 LEDs
SIM	Micro-SIM, eSIM possibility
Memory	128MB internal flash memory

PHYSICAL SPECIFICATION

Dimensions	93 x 64 x 10 mm (L x W x H)
Weight	80 g

OPERATING ENVIRONMENT

Operating temperature	-25 °C to +65 °C
Storage temperature	-25 °C to +85 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP41

FEATURES

Sensors	Accelerometer
Scenarios	Overspeeding, Man-down, Alarm, Auto Geofence, Manual Geofence, Action on call
Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
Configuration and firmware update	FOTA Web, FOTA, Teltonika Configurator (USB, Bluetooth), FMBT mobile application (Configuration)
SMS	Configuration, Events, Debug
GPRS commands	Configuration, Debug
Time Synchronization	GPS, NITZ, NTP

Safety information

This message contains information on how to operate GH5200 safely. By following these requirements and recommendations, you will avoid dangerous situations. You must read these instructions carefully and follow them strictly before operating the device!



Use only original batteries. Using uncertified manufacturer or different type batteries may cause an explosion.



Use batteries safely. Protect batteries from moisture, place them in a cool and dry place when storing. Avoid extensive operation at high temperatures. Do not attempt charging battery directly from the electrical mains. All utilized batteries shall comply with IEC 62133.



Power supply circuits used to charge the device connection must have safeguards, which prevent power leakage, short circuits or incorrect electrical grounding. Any used switches ought to be installed in a readily accessible location. Power must be uninterrupted.



Remove device safely. Device must be disconnected from computer or charger by unplugging the magnetic USB cable from the device.



In order to prevent device from mechanical damage it is advisable to transport it in a shock-resistant packaging. If device stopped working properly regardless of the settings only a qualified specialist can help.



Operate the device in suitable conditions. Do not use the device where mobile connectivity is forbidden.



Road safety first. Comply with local traffic laws, always hold you hands on a steering wheel when using a device. Your safety is of utmost importance when you drive.



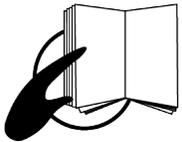
All wireless devices are sensitive to electromagnetic interference, as a result wireless devices affect the performance of each other.



Charging precautions. SELV LPS chargers, personal computers or laptops that device will be connected to must comply with the requirements of IEC 60950:2005 standard.

Certification and Approvals

- GH5200 CE RED - **Pending**
- GH5200 SAR - **Pending**



This sign on the package means that it is necessary to read the User's Manual before you start using the device.



This sign on the package means that all used electronic and electric equipment should not be mixed with general household waste.



Hereby, Teltonika declare under our sole responsibility that the above described product is in conformity with the relevant Community harmonization: European Directive 2014/53/EU (RED).

Warranty

TELTONIKA guarantees its products to be free of any manufacturing defects for a period of **24 months**. With additional agreement we can agree on a different warranty period, for more detailed information please contact our sales manager.

Contact us teltonika.it/company/contacts

All batteries carry a reduced 6 month warranty period.

If a product should fail within this specific warranty time, the product can be:

- Repaired
- Replaced with a new product
- Replaced with an equivalent repaired product fulfilling the same functionality
- TELTONIKA can also repair products that are out of warranty at an agreed cost.

Warranty Disclaimer

TELTONIKA PRODUCTS ARE INTENDED TO BE USED BY PERSONS WITH TRAINING AND EXPERIENCE. ANY OTHER USE RENDERS THE LIMITED WARRANTIES EXPRESSED HEREIN AND ALL IMPLIED WARRANTIES NULL AND VOID AND SAME ARE HEREBY EXCLUDED. ALSO EXCLUDED FROM THIS LIMITED WARRANTY ARE ANY AND ALL INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF USE OR REVENUE, LOSS OF TIME, INCONVENIENCE OR ANY OTHER ECONOMIC LOSS.

More information can be found at teltonika.it/warranty-repair