

User Manual

MTPMS-01

1、Product Description

The tire pressure monitoring system uses sensors installed on the tires to monitor the internal pressure and temperature of the tires, and uses wireless radio frequency technology to transmit the collected data information to a receiver installed in the cab. It can monitor the air pressure and temperature information of automobile tires in real time, as well as alarm abnormal conditions such as low pressure, high pressure, air leakage, and high temperature of tires, and remind car owners to take corresponding effective measures, so as to play a role in safety assistance.

Usage scenarios: 4-wheeled truck or multi-wheeled truck (supported up to 14 wheels)

2、Product Photos



Display Screen



Tyre pressure sensor

3、Product Specifications

3.1 Product Parameters

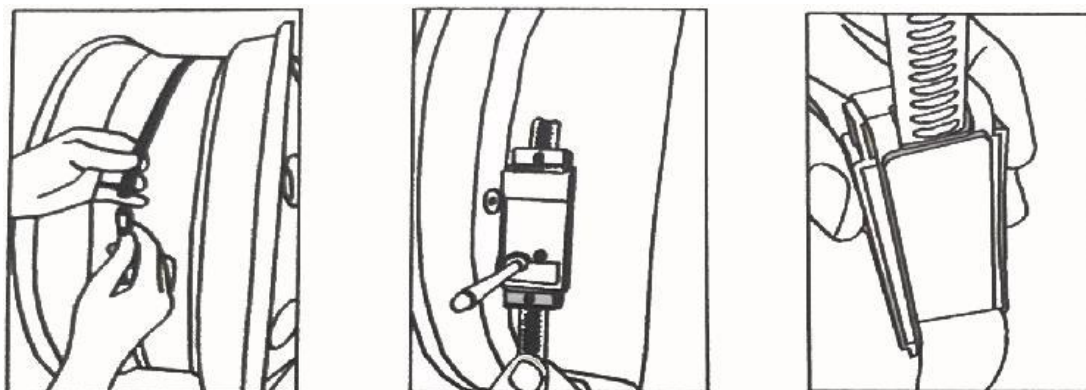
Items	Parameters
Screen	FSTN 3.4 inch
Installation Method	Placed on the center console
Operating Frequency	433.92MHZ
Operating Voltage	3.3V
Charging Mode	Type-C charging + solar charging
Dormant Current	≤6mA
Weight	127g
Storage Temperature	-30℃~+80℃

Operating Current	≤10mA
Operating Environment	-35°C~+80°C
Display Accuracy	±0.1bar
Shell Material	ABS+PC
Battery	Polymer Battery 1500mAh
Number of sensors displayed	4~14
Display Method	Support arbitrary selection of tire display position
Dimensions	131.9*63.2*28mm

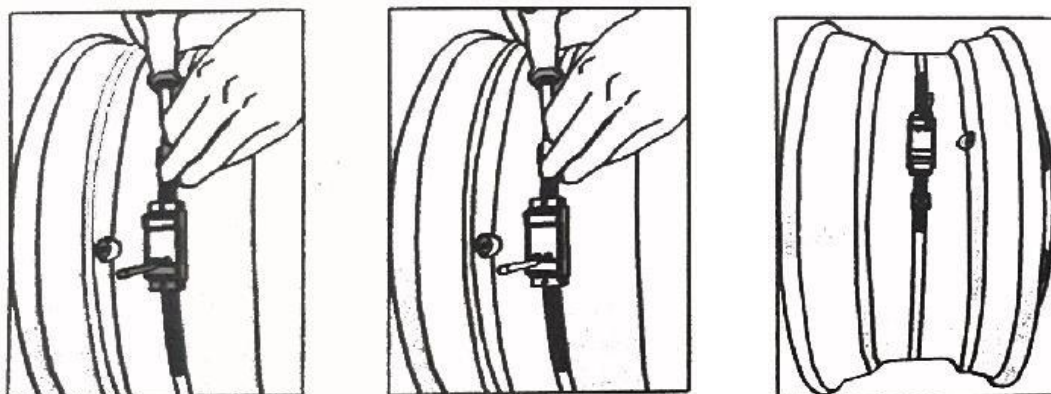
3.2 Built-in Sensor Parameters

Installation Method	Strap-on
Battery	CR2450H(460mAh)
Standby Current	<0.7uA
Emission Current	<10mA
RF Signal	FSK
Transmitted Frequency	433.92MHz±30KHZ
Pressure Measurement Range	0-15Bar
Temperature Measurement Range	-25°C~+99°C
Pressure Display Accuracy	±0.1bar
Temperature Measurement Accuracy	±2°C
Operating Temperature Range	-35°C~+125°C
Battery Life	More than 3 years (non-replaceable)
Dimensions	79*27*16.6mm

4、Built-in Sensor Installation



- ① Wrap the strap around the hub ② Thread the sensor on the perforated strap
③ Tighten the screws slightly to secure the strap



- ④ Install anti-slip rubber pads ⑤ Tighten the strap screws ⑥ The installation is complete

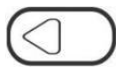
5、 Display Screen Installation and Function Settings

5.1 Display Screen Installation

① Take out the display screen and adhesive backing, and use the adhesive backing to fix the display screen bracket in the appropriate position of the center console.

② When using this product for the first time, first, check whether there is power, if there is no power or it won't turn on, please take out the USB cable and connect it to the USB port in the car to charge. The display uses solar-assisted charging, and when the battery of the display is found to be too low, it needs to be recharged via the USB port.

5.2 Button Function

	Power Button (Long press for 3 seconds) “-” in the settings
	Set Button (long press for 3 seconds) “Confirm” in the settings
	“+” in the settings

(1)、 Left Button (Power Button)

- ①、In the power off state, press and hold the left button for 3 seconds to turn on;
- ②、In the power on state, press and hold the left button for 3 seconds to shut down.
- ③、“Select” and “Decrease” button in the settings.

(2)、 Button

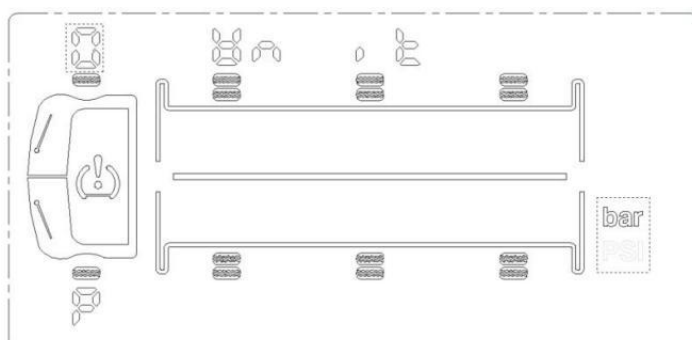
When the display is operating normally, long press the M button to enter "Menu and Settings". It is also the "Confirm" button in the settings.

(3)、 Right Button

When the display is operating normally, it is the "Select" and "Decrease" button in the settings.

5.3 Pressure Unit Settings

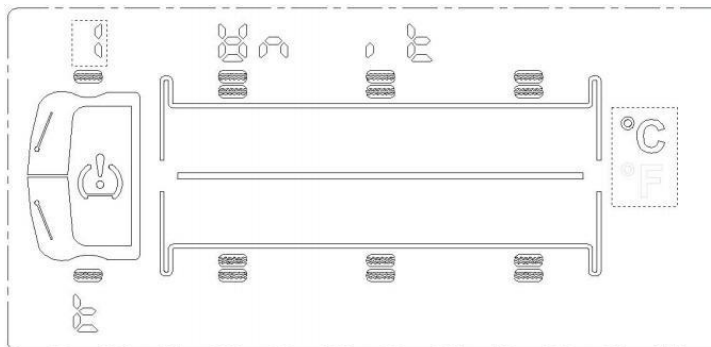
When the display is powered on normally, long press the  button to enter the menu, and the menu bar displays the '0' page. Press the  button, and the pressure unit flashes, press  /  button to find the pressure unit needed (bar/PSI), press the  button to confirm, long press  button to return to the main page.



5.4 Temperature Unit Settings

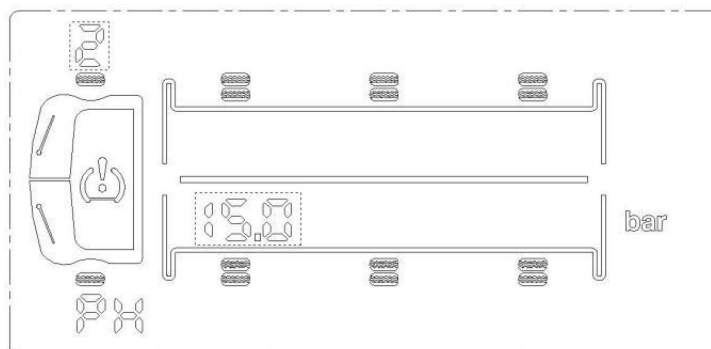
When the display is powered on normally, long press the  button to enter the menu, press the  button once, and the menu bar displays the '1' page. Press the  button

button to confirm, and the temperature unit flashes. Press  /  button to find the temperature unit needed (°C/F), press the  button to confirm, and the temperature unit will no longer flash, long press  button to return to the main page.



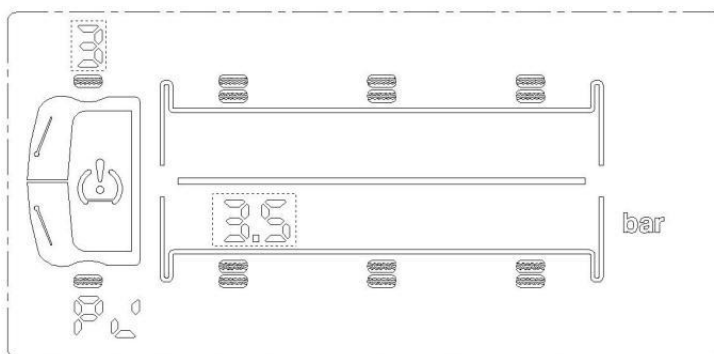
5.5 High Voltage Alarm Value Settings

When the display is powered on normally, long press the  button to enter the menu, press the  button twice, and the menu bar displays the '1' page. Press the  button to confirm, and the high voltage alarm value flashes. Press  /  button to set the high voltage alarm value needed, press the  button to confirm, long press  button to return to the main page.



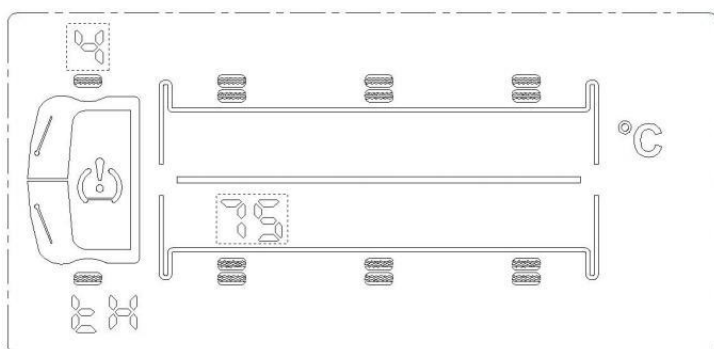
5.6 Low Voltage Alarm Value Settings

When the display is powered on normally, long press the  button to enter the menu, press the  button three times, and the menu bar displays the '3' page. Press the  button to confirm, and the low voltage alarm value flashes. Press  /  button to set the low voltage alarm value needed, press the  button to confirm, long press  button to return to the main page.



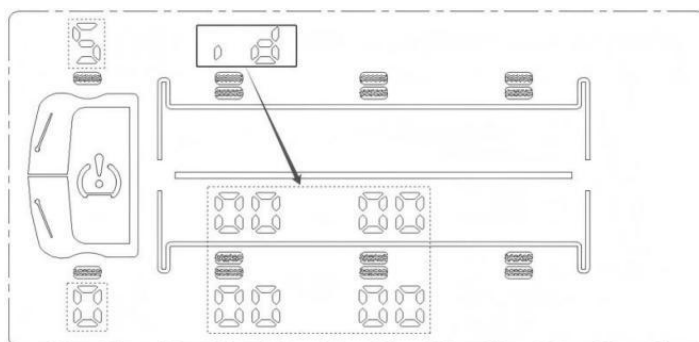
5.7 Temperature Alarm Value Settings

When the display is powered on normally, long press the **M** button to enter the menu, press the **▶** button four times, and the menu bar displays the '4' page. Press the **M** button to confirm, and the temperature alarm value flashes. Press **◀** / **▶** button to set the temperature alarm value needed, press the **M** button to confirm, long press **M** button to return to the main page.



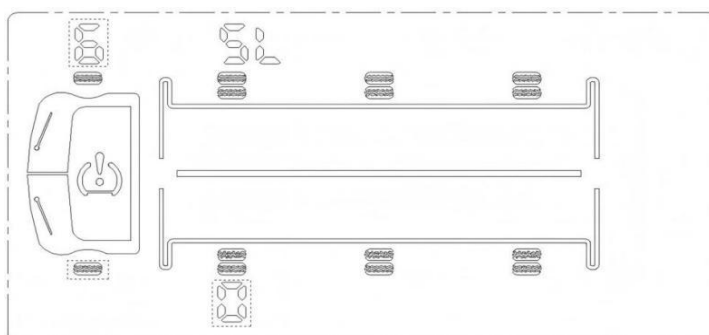
5.8 Pairing of the Display with the Sensor

When the display is powered on normally, long press the **M** button to enter the menu, press the **▶** button five times, and the menu bar displays the '5' page. Press the **M** button to confirm, and the "0" in the lower left corner flashes. Press **◀** / **▶** button to select the sensor number to be paired (Reference: Tire serial number corresponding to the tire installation diagram), press the **M** button to confirm. At this time, the data in the 4 positions on the screen flashes, then install or remove the sensor (the built-in sensor can be inflated or deflated), when the ID data changes and stops flashing, the pairing is successful, long press **M** button to return to the main page.



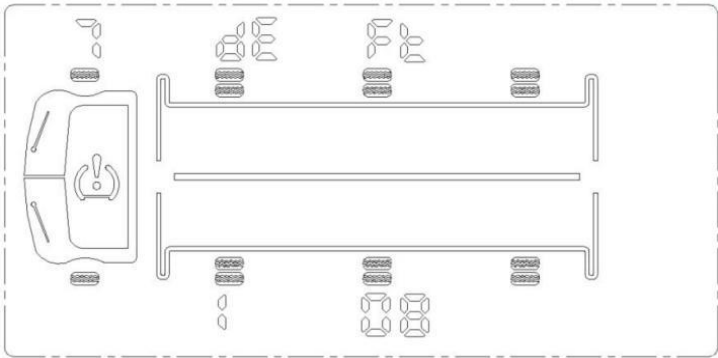
5.9 Number of Tires Displayed Settings

This product supports 2-wheeled to 14-wheeled vehicles, and users can choose the corresponding display according to the number of tires of their car model. Long press the **M** button to enter the menu, press the  button six times, and the menu bar displays the '6' page. Press the **M** button to confirm, the tire and number flashes. Press  /  button to select the tires that need to be removed or displayed. Press the **M** button to remove or display the tire (Press the **M** button again to restore the tire display). Long press **M** button to return to the main page.

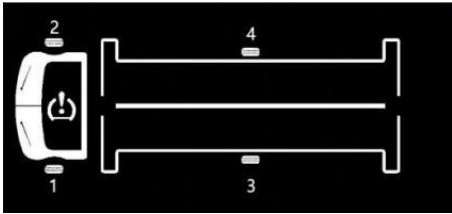


5.10 Reset to Factory Settings

When the display is powered on normally, long press the **M** button to enter the menu, press the  button seven times, and the menu bar displays the '7' page. Press the **M** button twice, at this time, the display will return to factory settings, and the entire display interface will show "00". When driving the vehicle, the display will automatically relearn the ID data of the sensor and automatically display tire pressure and tire temperature data. (This function is suitable for batch replacement of sensors or troubleshooting of sensor data failures).



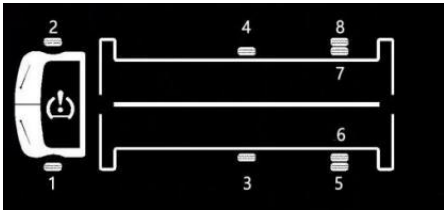
6、Tire Serial Number Corresponding to Vehicle Model
Installation Diagram



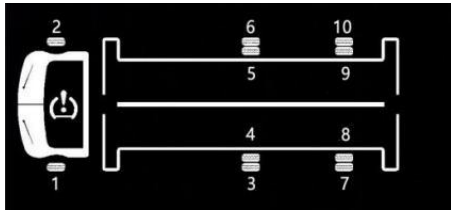
4 wheels



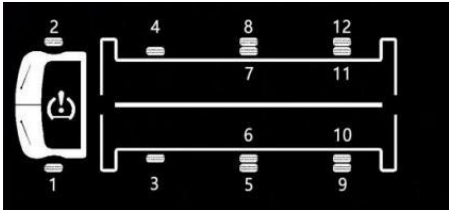
6 wheels



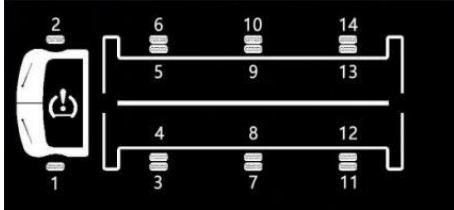
8 wheels



10 wheels



12 wheels



14 wheels

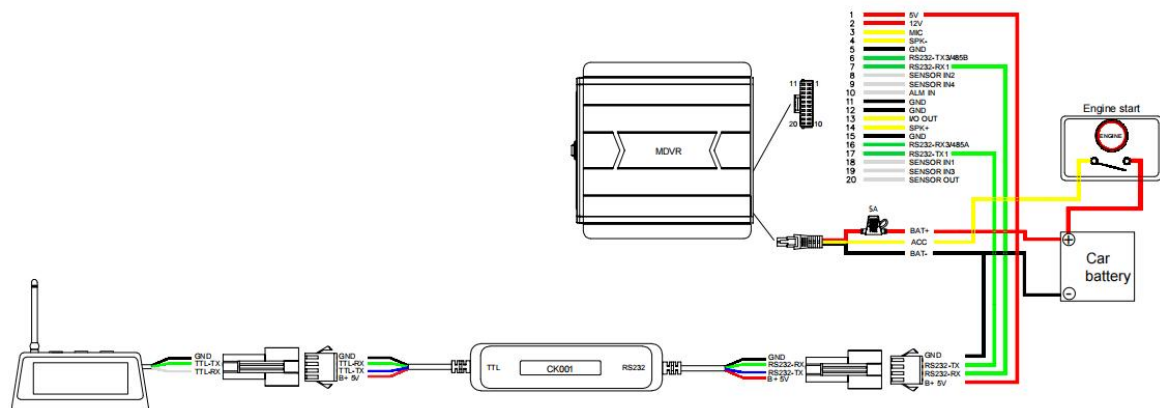
7、Wiring

7.1 Display and CK001 Wiring

The TTL-RX of the display should be connected to the TTL-TX of the CK001, the TTL-TX of the display should be connected to the TTL-RX of the CK001, and the GND of the display should be connected to the GND of the CK001.

7.2 CK001 and MDVR Wiring

The RS232-RX of the CK001 should be connected to the RS232-TX of the MDVR, the RS232-TX of the CK001 should be connected to the RS232-RX of the MDVR. The B+ 5V of the CK001 should be connected to the 5V of the MDVR. The GND of the CK001 should be connected to the BAT- of the MDVR (or the GND of IO extension).



8、Dashcam & MDVR Host Configuration

After completing the wiring, power on the main unit and accessories. Connect your mobile phone to the main unit's Wi-Fi network, then use the configuration app (MCTool) to set the parameters. The specific configuration is as follows:

1) MCTool > Setting > Peripheral > COM1

Function selected as 808-UT

Type selected as 232

Baud rate selected as 9600

Other settings remain at their default values.

 **COM1**

peripheral

Function	808-UT	>
Type	232	>
Baud Rate	9600	>
Data Bit	8	>
Stop Bit	1	>
Parity	None	>

Save

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2) MCTool > Setting > Serial Information

Check whether the status of COM1 is normal

 Serial Information	
Name	COM1
Function	808-UT
Status	normal
Remarks	

9、MettaXIOT Platform configuration

1) Monitor

Please first ensure that the device has been deployed on the MettaXIOT platform and possesses valid positioning information.

2) Devices > IMEI > Search > Edit

Locate the device requiring configuration within the platform and proceed to edit it.

MettaX IoT

DashboardCustomersUsersDevicesMonitorVideoReports

17:00:49(UTC+08:00)

liaower

Devices

IMEI5679

ModelSelect

Device NameEnter device name

LabelSelect

Activation Time

Start date

End date

Device statusSelect

PhonePlease enter your phone num

☐ Include sub-customer data

Search

Reset

Sell Devices

Export

Batch Commands

Batch Update

Add

Add Devices in Bulk

License Binding

Tag Management

No.	Device Name	IMEI	Model	Activation Time	Expiration Time	ICCID	Assigned customer	Operation
1	MC202-75679	940077775679	MC202	2024-11-26 19:35:08	2035-01-25	-	DevTest	EditCommand

3) Sensor Configuration > Add Sensors

Add a new sensor

MC202-75679(940077775679)

Basic Information

Calculation Rules

Sensor Configuration

License

Data

Daylight Saving Time

Add Sensors

Sensor No defaults to 1

Sensor Name may be customised as required.

Sensor Type may be selected as required (this document uses tyre pressure sensors as an example), with TPMS selected.

Sensor Model selected as TPMS01

Number of Tyres Number of Tyre Pressure Sensors

RFID tags for tyre pressure sensors (enter the number of RFID tags per tyre pressure sensor)

Sensor Configuration

Get Sensor Value

* Sensor Type

TPMS

* Sensor Model

TPMS01

Basic Information

* Sensor No.

1

* Sensor Name

TPMS01

Sensor Information

Number of Tires

4

No. 1

RFID

1B02438A

* Tire Pressure(kPa)

Tire Pressure(kPa)-left_front

* Tire Temperature(°C)

Tire Temperature(°C)-left_front

Save

Sensor Configuration

Get Sensor Value

RFID

1B02438A

* Tire Pressure(kPa)

Tire Pressure(kPa)-left_front

* Tire Temperature(°C)

Tire Temperature(°C)-left_front

No. 2

RFID

* Tire Pressure(kPa)

Tire Pressure(kPa)-right_front

* Tire Temperature(°C)

Tire Temperature(°C)-right_front

No. 3

RFID

1B0439B6

* Tire Pressure(kPa)

Tire Pressure(kPa)-left_back

* Tire Temperature(°C)

Tire Temperature(°C)-3left_back

No. 4

RFID

* Tire Pressure(kPa)

Tire Pressure(kPa)-right_back

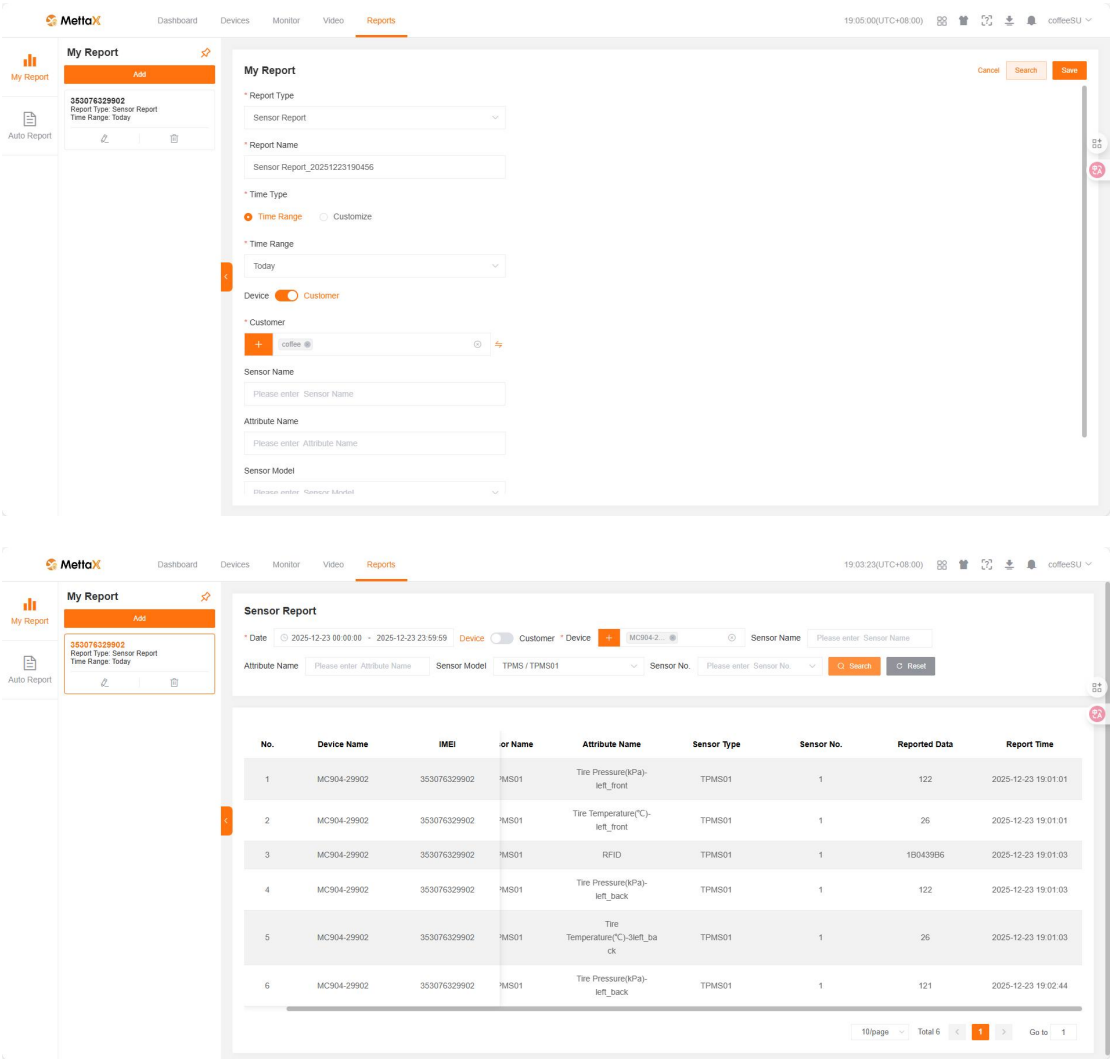
* Tire Temperature(°C)

Tire Temperature(°C)-right_back

Save

10、 MettaXIOT Platform Information Display

Report generation for tyre pressure sensors and viewing historical reports



11、 Warm Reminders

- ①The installation process should be operated in strict accordance with the content of this manual, and be sure to ask experienced tire installation technicians to disassemble and assemble, if there are any problems caused by irregular installation, our company will not be responsible.
- ②When you need to disassemble and assemble the tire again, avoid the tire pressure sensor to prevent damage.
- ③When setting the alarm value, it is necessary to strictly abide by the range of the alarm value, and different models should be set according to the parameters of their tires or

manuals, and the range given by the agent, and there is no need to modify the system parameters after setting them.

- ④ Please check and confirm the battery level to make sure that it is charged.

◦