



Instructions for use McKare VSR-22



Contactless vital signs monitoring

Table of contents

Please read the user manual carefully before installing the product and follow the installation instructions. Please make sure that you hand this manual over to the person who uses it after installation.

1.	Safety...	3
2.	Features.	5
3.	Components	6
4.	Component description.	7
5.	Sensor Installation Instructions	8
6.	WiFi connection	13
7.	Error	17
8.	Product Specification	18
9.	Product Warranty	19
10.	Service & Legal Notices	22

Safety

Caution

This product is not a medical device and cannot be used to diagnose, change medication or prevent disease/injury.

Attention

Before installing and commissioning your device, please read the enclosed safety instructions carefully.

Attention

The use of the wrong plug-in power supply can lead to a defect in your device! Only use the plug-in power supply supplied with it.

Attention

The product must not be used outdoors!

The product must be disposed of properly as it contains electronic components.

Please do not introduce electrically conductive or flammable materials into the devices.

The opening of the housing is to be avoided in any case and releases the manufacturer from the warranty.

Do not drop the product or expose the device to strong shocks.

Please do not store or install the appliance in places that are directly and intensely exposed to sunlight or in the immediate vicinity of radiators.

Safety

Caution

Only use the attachments and accessories supplied with the product.

Do not place towels or other objects on the device.



This icon highlights useful information



The product is based on radar technology and can be influenced by other wireless products.



Data transmission requires a stable 2.4 G Wifi network with good data transfer rate.



During the regular maintenance and update periods of the cloud server, the usual service cannot be provided for the purpose of improving functionality or usability.

Features

This product is a device that records vital signs with a micro-Doppler radar in the 24 GHz band to measure biosignals such as heartbeat and breathing in real time and without contact.



Heart rate

Non-contact heart rate measurement



Respiratory rate

Non-contact measurement of respiratory rate



Movement behaviour

Provides information about activity times



Occupancy or Absence

Attendance and Absence Information



Sleep monitoring

Information about sleep times and quality



Fall detection

detects and alarms in the event of a fall

Caution

This product is not a medical device and cannot be used to diagnose, change medication or prevent disease/injury.

McKare does not release the duty of care and care. Never leave your baby unattended or alone at home. Make sure that a supervisor is always present.

Components



Radar Sensor McKare VSR-22

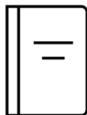


240V

Mains connection / AC Adaptor 100-



Double-sided tape assembly guide



Directions for use



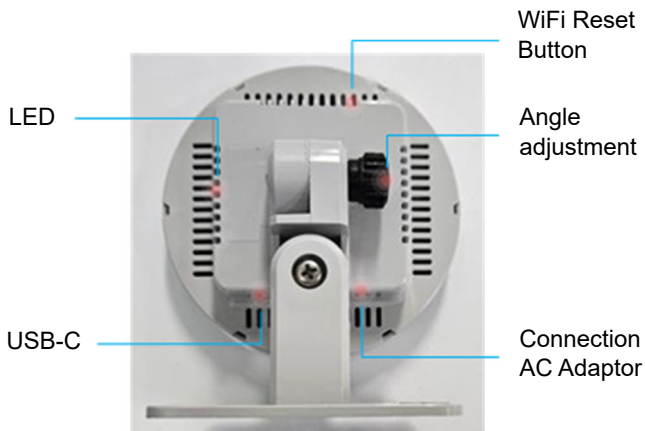
Optional: Extension cable for the power supply of the sensor

Component Description



IR Sensor

WiFi residual button



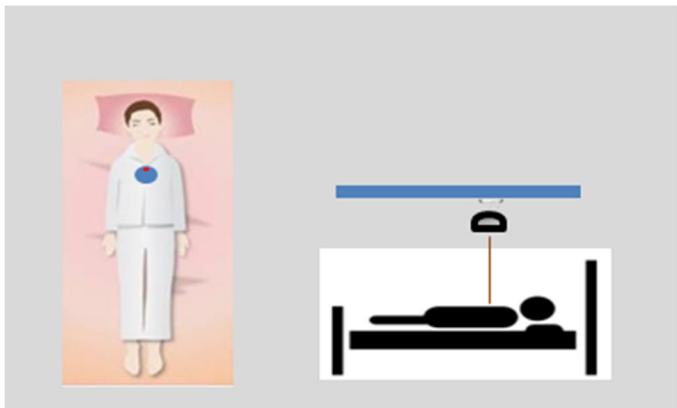
WiFi Reset
Button

Angle
adjustment

Connection
AC Adaptor

Sensor Installation Instruction

Sensor positioning for ceiling mounting



The distance between the sensor and the chest should be between 1.5 m and 2 m.

The intervals should not be shorter or longer than described in order to obtain the most accurate vital parameters possible.

The sensor should be installed at the level of the chest in a normal lying position.

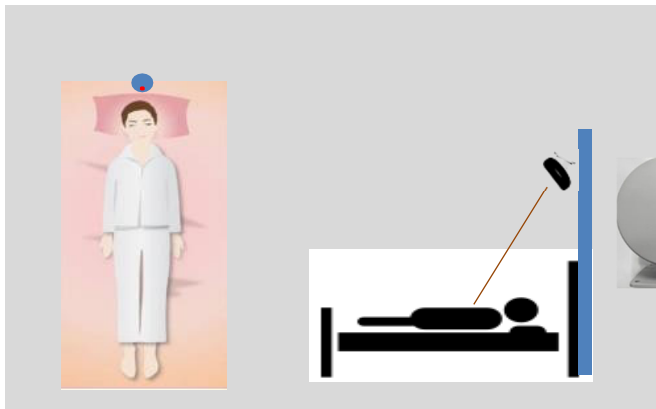
The IR sensor must be aligned with the head. (lying position)

Caution

! : Only carry out installation with a secure screw connection.

Sensor Installation Instruction

Sensor positioning for wall mounting



The distance between the sensor and the chest should be between 1.5 m and 2 m.

The intervals should not be shorter or longer than described in order to obtain the most accurate vital parameters possible

The sensor should be mounted at the head of the bed, in a normal lying position.

The IR sensor is said to be located in the lower half.

Caution
: Only carry out installation with a secure screw connection.

Sensor Installation Instruction

Adjusting the angle of the radar sensor



Unlock the radar sensor by turning the knob of the angle adjustment unit counterclockwise.



Set the radar sensor to the desired vertical angle.



Turn the knob of the angle adjustment part clockwise to fix the radar sensor.



The angle adjustment range of the radar sensor is 90° up and down. The angle can be adjusted in 10° increments



If necessary, an additional 90° to the left and right can be adjusted by adjusting the angle adjustment screw with a Phillips screwdriver.

Sensor Installation Instruction

Mounting the sensor

In order to avoid falling and the associated risk of injury, the assembly should always be carried out with a fixed and durable method. This can be guaranteed with screw connection / assembly. Please pay attention to the surface on which the installation is carried out. Use the appropriate dowels depending on the substrate. (e.g. cavity dowels for plasterboard walls)



Place the sensor mount on the mounting surface and secure it by screwing the mounting screw into the screw hole.

Attention:

The double-sided adhesive tape carried with you is only intended to serve as an assembly aid and does not replace the fastening with e.g. screws.

Sensor Installation Instruction

Power connection of the AC adapter



LED



Connect the power USB-C supply of the device to a power outlet using the plug-in power supply provided.

Connection
AC adapter



After a few seconds, the blue and red LEDs will flash alternately and then turn off. The red LED will then light up permanently.



The product will automatically turn on when connected to the adapter and turn off when the adapter is disconnected.

Caution

Do not use the USB-C port on the left side of the adapter port, otherwise it may malfunction. This is exclusively a terminal for engineering and development.

WiFi connection

Data communication only works in a stable WiFi network in the 2.4 GHz range. Check that the Wi-Fi router is working before you start connecting.

To ensure the general security standard in the WiFi network, please use a router with WPA2PSK & AES encryption.

Attention

! Please do not use a public Wi-Fi network.

WiFi Setting

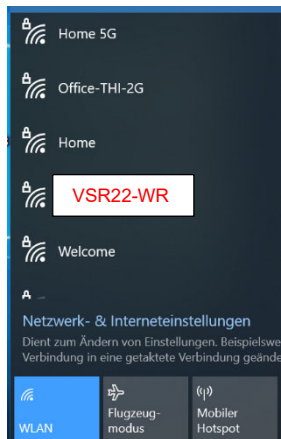
Follow these steps to set up the WiFi connection.



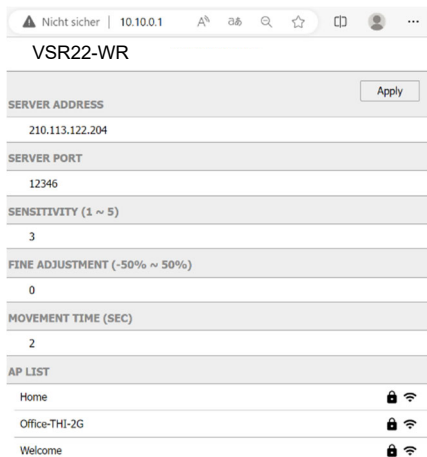
1. Take the plastic wire that bundles the line of the AC adapter and, while the red LED is on, press the WiFi adjustment button on the top of the sensor.

Now the blue LED lights up; then the red LED and the blue LED will flash alternately. The connection is established when the blue LED lights up continuously.

WiFi connection



2. Select VSR22-WR on the WiFi search screen of your laptop or mobile device. If a password is requested, please enter the digits 12341234.



3. Open an internet browser, type **10.10.0.1** in the address bar, and press Enter to go to the [VSR22 SETUP] window

WiFi connection

Nicht sicher | 10.10.0.1

VSR22-WR

SERVER ADDRESS

210.113.122.204

SERVER PORT

12346

SENSITIVITY (1 ~ 5)

3







FINE ADJUSTMENT (-50% ~ 50%)

0

MOVEMENT TIME (SEC)

2

AP LIST

Home	 
Office-THI-2G	 
Welcome	 

4. (AP LIST) Select an SSID to connect to.

5. Enter your network password and wait for the connection to be successfully confirmed. (Success!) 6. Click OK to complete the process.

Nicht sicher | 10.10.0.1

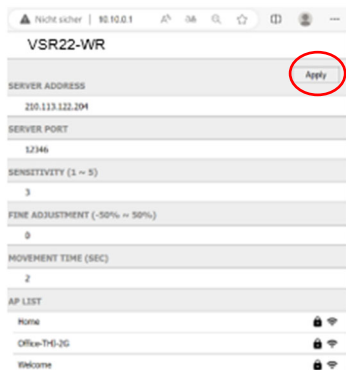
Please wait...

CONNECTING TO OFFICE-THI-2G







Success!

If you do not receive a connection confirmation, repeat process 2-6.

WiFi connection



The screenshot shows a web-based configuration interface for a device labeled 'VSR22-WR'. The interface includes fields for 'SERVER ADDRESS' (210.113.122.204), 'SERVER PORT' (12346), 'SENSITIVITY (1 ~ 5)' (3), 'FINE ADJUSTMENT (-50% ~ 50%)' (0), and 'MOVEMENT TIME (SEC)' (2). At the bottom, there is an 'AP LIST' table with three entries: 'Home', 'Office-THI-2G', and 'Welcome', each with a lock icon and a Wi-Fi signal icon. An 'Apply' button is located in the top right corner of the form, circled in red.

AP LIST	
Home	 
Office-THI-2G	 
Welcome	 

7. When you return to the window (VSR22 SETUP), press the [Apply] button and complete the setup. The red LED will light up, the blue LED and the red LED will flash alternately, then all the LEDs will go out.

8. After you complete the WiFi setup, the sensor will automatically connect to the network without repeating the whole process 1-7.

Tolerances

The tolerances are usually the following values

Fall detection:	90%
Vital signs (resting):	95%
Vital signs (on the move):	90%

Fault messages

Suggestions for troubleshooting that could occur in the operation of the VSR22. In the unusual event that a fault cannot be resolved, please contact the point of sale or customer service.

Problem	Resolution

Product Specification



Category	Specification
Model No.	VSR22-WR
Radar Frequency	24GHz (24.050 ~ 24.250GHz)
Radar Measurement Method	Micro Doppler Processing Method
Radar Measurement Distance	1~5m(Heart Rate: within 2m (Max.))
Radar Measurement Angle	80°(H) x 34°(V)
Radar Antenna	2 x 4 patch antenna
IR Sensor Measurement Range	0 ~ 65°C
IR Sensor Measurement Angle	45°(H) x 45°(V)
IR Sensor Accuracy	±2.5°C
Sensor Angle Adjustment	90° degrees up and down
Wi-Fi	2.4GHz (802.11 b/g/n)
Power	9V / 1A (adapter provided)
Power Consumption	300mA
Size / Weight	105(W) x 90(D) x 130(H)mm / 165g
Operating Temp. / Humidity	0 ~ 80°C / Max. 85%

Product Warranty

This product is manufactured through a strict quality control and inspection process.

The warranty service for the sensor refers to the contents specified in the warranty certificate.

The free warranty period is based on the date of purchase. If the date of purchase is not specified, the warranty period is 12 months from the date of manufacture.

Claims not described in the quality guarantee are guaranteed for the sensor in accordance with the "Consumer Dispute Resolution Standards" announced by the Fair Trade Commission.

Paid services:

If the customer makes a service request, travel expenses may be incurred, regardless of whether the product is defective or not. Please read the user manual before requesting service from us. This also applies if the warranty period has expired or is within the warranty period, the following cases are subject to paid repairs.

1. In cases where there is no need to replace parts or disassemble the product, and the problem can be solved by the customer checking the instruction manual and changing the product settings on their own.
2. In the event of product failure or damage caused by external shock or flooding, a fire caused by

Product Warranty

has been ignited outside the product, or water damage from the ceiling.

3. In case of product failure due to drop or strong impact.
4. In case of loss or damage to parts due to arbitrary disassembly by the customer
5. If an error occurs when using AC adapter that is not included
6. In the event of failure due to installation, movement, removal, etc. of the product by any person other than an employee or engineer recognized by the company

Product Warranty / Notification

Please attach the invoice for the sensor.

Please send the sensor to the distributor or customer service.

The serial number is located on the back of the sensor.

Model No.	VSR22-WR
Serial number	
Purchase	Day,Month,Year
Customer Name	
Customer Address	
Sold by:	

Customer Service Germany:

TH International GmbH Ettighofferstr. 7853123 Bonn

E-Mail: mckare@thi-cs.de

Service & Legal Notice

Legal notice

Warranty

This publication is subject to change.

TH International GmbH (THI) does not give any warranty on the information contained in this user manual. THI accepts no liability for any indirect, indirect, incidental, consequential or other damages in connection with the delivery, provision or use of this user manual.

Copyright © TH International GmbH (THI)

All rights to the data contained herein - in particular duplication and distribution - are reserved by THI.

Open source software in this product: This product contains, among other components, open source software developed by third parties and licensed under an open source software license. These open source software files are subject to copyright. An up-to-date list of the

Open source software programs and the open source software licenses can be found under <https://jcft.co.kr/support>

JCFTechnology hereby declares that this device complies with the basic requirements and other relevant requirements of Directives 2014/35/EU, 2014/30/EU, 2011/65/EU. The EU Declaration of Conformity can be downloaded here: <https://jcft.co.kr/support>



Herzfrequenz



Atemfrequenz



Bewegungsverhalten



Sturz-Erkennung



Mitarbeiter-Entlastung

Berührungslos

Vitalwerte-Monitoring



Importer, system provider, distributor:

TH International GmbH (THI)

Ettighofferstr. 7853123 Bonn E-Mail: McKare@thi-cs.de



HIGH-TECH MADE in KOREA

