

# McKare VSR-22

# INSTRUCTIONS FOR USE









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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.

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## **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.
- The product is based on radar technology and can be influenced by other wireless products.
- Data transmission requires a stable 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.



This icon highlights useful information



## **FEATURES**

This product is a device that records vital signs with a microdoppler 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



## 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



PSU / AC Adaptor 100-240V



Assembly guide 3M (Double-sided tape)



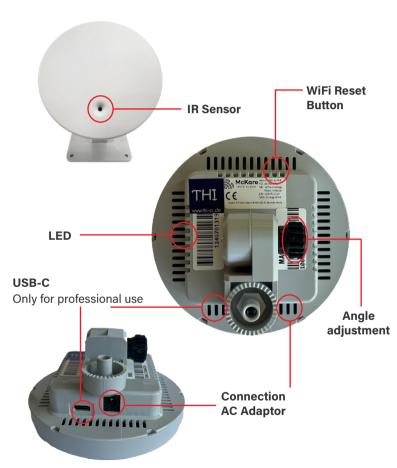
**Directions for use** 



**Optional:** Extension cable for the power supply of the sensor

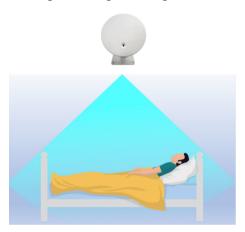


## **COMPONENT DESCRIPTION**





## 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.







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.



## 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.



## 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



#### **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.



## Power connection of the AC adapter



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



Fig. Home SG

G. Office-THI-2G

Fig. Home

G. VSR10\_AP

Fig. Welcome

A.

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



## WIFI CONNECTION

## WiFi Setting



OK

- Open an internet browser, type 10.10.0.1 in the address bar, and press Enter to go to the [VSR22 SETUP] window.
- (AP LIST) Select an SSID to connect to.
- Enter your network password and wait for the connection to be successfully confirmed. (Success!)
- 6. Click OK to complete the process.



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



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



## **ERROR**

#### **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 intenna
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	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 month 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 maybe 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.

- 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.
- In the event of product failure or damage caused by external impact or flooding, a fire lit from outside the product, or water damage from the ceiling.
- 3. In case of product failure due to drop or strong impact.
- In case of loss or damage to parts due to arbitrary disassembly by the customer. If an error occurs when using AC adapter that is not included.



## PRODUCT WARRANTY

- If an error occurs when using AC adapter that is not included.
- 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.



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. 78 53123 Bonn

E-Mail: support@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.

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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



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## **HIGH-TECH MADE in KOREA**

