# Checkme O2 Max

# **Smart Wrist Pulse Oximeter**

# **User Manual**



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# 1. Introduction

#### 1.1 Intended Use

This product is intended to be used for measuring, displaying and storing of pulse oxygen saturation  $(SpO_2)$ , pulse rate and motion in home or healthcare facilities environment. App can show real-time  $SpO_2$ , pulse rate; get record, display results and report.

#### Note:

The data and results provided by this device are for pre-check screening purpose only and cannot be directly used for diagnostic or treatment.

The data provided by the APP and PC software (optional) is not intended for diagnosis or treatment purpose, always consult your doctor for any health condition.

# ⚠ Warnings and Cautionary Advices

DO NOT squeeze the sensor or apply excessive force on the sensor & cable.



- Do not use this device during MRI examination.
- Never submerge the device in water or other liquids. Do not clean the device with acetone or other volatile solutions.
- Do not place this device in pressure vessels or gas sterilization device.
- Consult your doctor immediately if you experience symptoms that could indicate acute disease.
- Do not self-diagnose or self-medicate on the basis of this device without consulting your doctor. In particular, do not start taking any new medication or change the type and/or dosage of any existing medication without prior approval.
- · Use only cables, sensors and other accessories specified

in this manual.

- Prolonged continuous SpO<sub>2</sub> monitoring may increase the risk of undesirable changes in skin characteristics, such as irritation, reddening, blistering or burns.
- Check the SpO<sub>2</sub> sensor application site every 6-8 hours to determine the positioning of the sensor and the circulation and skin sensitivity of the patient. Patient sensitivity varies depending on medical status or skin condition. For patients with poor peripheral blood circulation or sensitive skin, inspect the sensor site more frequently.
- Functional tester cannot be used to assess the accuracy of a SpO<sub>2</sub> sensor or a device.
- This device is designed to determine the arterial oxygen saturation percentage of functional hemoglobin. Factors that may degrade pulse oximeter performance or affect the accuracy of the measurement include the following:
  - excess ambient light
  - excessive motion
  - electrosurgical interference
  - blood flow restrictors (arterial catheters, blood pressure cuffs, infusion lines, etc.)
  - moisture in the sensor
  - improperly applied sensor
  - incorrect sensor type
  - poor pulse quality
  - venous pulsations
  - anemia or low hemoglobin -concentrations
  - cardiogreen and other -intravascular dyes
  - carboxyhemoglobin
  - methemoglobin
  - dysfunctional hemoglobin

#### 1.2 Guide to Symbols

Symbol	Description
Ŕ	Type BF-Applied Part
444	Manufacturer
EC REP	European authorized representative
CE0197	CE Marking indicating conformance to EC directive No. 93/42/EEC concerning medical devices.
R	MRI unsafe. Presents hazards in all MR environments as device contains strongly ferromagnetic materials.
X	Indicate separate collection for electrical and electronic equipment (WEEE).
IP22	Protected against spraying water and against access to hazardous parts with a tool, per IEC 60529.
8	Follow Instructions for Use.
$\wedge$	Warning and Caution!
SN	Serial number
$\otimes$	No alarm system.

## 1.3 Unpacking

Main Unit × 1 Ring Sensor × 1 Cable × 1 User Manual × 1

# 2 Using the Monitor

2.1 Overview



- 1. Pulse oximeter
- 2. Wristband
- 3. Sensor interface / charging interface
- 4. Power button
- 5. SpO2 sensor

#### Screen display item description:

SpO2	SpO2
•	Pulse rate
$\triangleleft$	Wear the sensor
19:30	Time
	Remaining battery capacity
Ť	Alert is on
<b>X</b>	Alert is off
≯	Bluetooth is connecting

## 2.2 Charging

Charge the battery before using.

Use the charge cable to charge the battery of device in the USB Port of the computer or with USB charging adapter.

After being fully charged, the device will power off automatically.

# 2.3 POWER ON/OFF

# POWER ON:

Press the button for 1 second to turn on the device.

## POWER OFF:

Automatically power off: The device will turn off automatically in 2 minutes if no measurement, no operation or without App connection.

Manually power off: You can press the button for about 2 seconds to turn off.

# 2.4 TAKE THE FIRST RECORDING

**START.** Wear the device and the Ring Sensor, press the button to power on. And keep yourself in the *quiet environment*.

(For the sake of clarity, recommended the user wear the monitor watch on their left wrist and put the ring sensor on the thumb. If it is too tight, try another finger. Avoid being loose.)



STOP. After the record, take off the Ring Sensor (and

the device), the recording will be save after the countdown. (If the working time is less than 1 minute, the data will not be saved.) **Note:** 

 Please avoid excessive motion for the sensed finger during recording and avoid any strong ambient light condition.

# 2.5 Stop monitoring & sync data

Take off the sensor, the countdown will begin.

During the countdown, if you wear the sensor again, the record will be resumed.

#### After the countdown, the data will be ready for sync.

#### Note:

The duration of the recording is 1mins~10 hours. And the device can collect and store maximum 4 recording, when the 5th recording coming, the first recording will be will covered.

#### Sync data to the ViHealth App

You can Sync the data to your app after the countdown or next time after you turn on the device.

Note: Refer the ViHealth app manual for more details.

## 2.5.1 How to find the Serial Number?

- 1) Detach the main unit from wristband.
- 2) Flip the main unit over, the series number is printed on the label of product.









#### Note:

The serial number is on the back of the device.

## 2.6 How to synchronize the time of the device

The time of the **monitor** will be automatically synchronized with the network time on your smart device after connected with the app.

Note: Refer the ViHealth app manual for more details.

## 2.7 Alert

When the monitor detects low blood oxygen or abnormal pulse rate, it supports triggering vibration reminders or sound reminders.

You can customize the vibration reminder after the monitor power on, or use the App to configure the vibration intensity.

The sound reminder only can be configured on the App.





# 2.8 Download App

App name: ViHealth iOS: App Store Android: Google Play



#### Compatibility

The device is compatible with iOS versions 9.0+ and Android versions 5.0+. Refer the ViHealth app manual for more details.

## 2.9 Bluetooth Connection

The device Bluetooth will be enabled automatically when the device is on.

**Note: DO NOT PAIR** in the settings of your smart device.

# 3 PC software

## 3.1 Download the PC Software

#### PC Software: O2 Insight Pro

Download from: <u>www.viatomtech.com/support</u> Install the software on Windows PC or Mac.

#### 3.2 How to connect the monitor to PC

- 1. Turn on device, connect the device to PC USB port with the supplied Cable of data.
- 2. Open the PC software, download data from the device.
- With the optional PC software, You can view and print report, which can also be exported as PDF or CSV files.

## 3.3 How to connect the monitor to Mac

1. Turn on device, and turn on the Bluetooth of the Mac.

- 2. Open the "**O2 Insight Pro**" software and click the "Connect" on the screen. Choose your device to connect.
- 3. Then click the "download" on the screen. Then the data will sync with your Mac.
- 4. You can view and print report, which can also be exported as PDF or CSV files.

## 4 Maintenance

#### 4.1 Cleaning

Use a soft cloth moistened with water or alcohol to clean the device surface.

#### 4.2 Battery

To keep the battery in good condition, charge the battery every 6 months when the device is not in use.

# 5 Troubleshooting

Problem	Possible Cause	Possible Solution
Device does	Battery may be	Charge battery and try
not turn on or	low.	again.
no response.	Unexpected	Press the button for about
	software condition	10 seconds to reset
	Device might be	Please contact your local
	damaged.	distributor.
The app	The Bluetooth of	Turn on the Bluetooth in
cannot find	your phone is off.	the phone.
the device.		

# 6 Specifications

Classifications		
	MDD, 93/42/EEC	
EC Directive	R&TTE, 1999/5/EC	
	ROHS 2.0, 2011/65/EU	
Degree protection against electrical shock	Type BF	
Environmental		
ltem	Operating	Storage
Temperature	5 to 40°C	-25 to 70°C
Relative humidity (noncondensing)	10% to 95%	10% to 95%
Barometric	700 to 1060 hPa	700 to 1060 hPa
Degree of dust & water resistance	IP22	
Physical		
Weight	18 g (main unit)	
Display	OLED	
Wireless	Bluetooth 4.0 Bl	LE
Vibrator	Built in	
Power Supply		
Charge input:	DC 5V ±10%	
Battery type	Rechargeable lit	thium-polymer
	battery	
Battery run time	72 hours	
Charge time	2.5 hours	
SpO <sub>2</sub>		
Standards	Meet standards	of ISO 80601-2-61
Measurement accuracy verification: The SpO <sub>2</sub> accuracy has been verified in human experiments by comparing with arterial blood sample reference measured with a CO-oximeter. The pulse rate accuracy has been verified by Emulator. Pulse oximeter measurement are statistically distributed and about two-thirds of the measurements are expected to come within the specified accuracy range compared to CO-oximeter measurements		

SpO <sub>2</sub> range	70% to 100%	
SpO <sub>2</sub> Accuracy (Arms)	80-100%:±2%, 70-79%:±3%	
PR range	30 to 250 bpm	
PR accuracy	±2 bpm or ±2%, whichever is	
	greater	
Wave length	660-940nm	
Output power	Red/Infrared: 3mW max. avg.	
Storage		
Capacity	4 records,10 hours for each	
Mobile APP		
iOS	iOS 9.0 or above, iPhone 4s/iPad	
	3 or above	
Android	Android 5.0 or above, with	
	Bluetooth 4.0 BLE	

#### 7 Electromagnetic Compatibility

The device meets the requirements of EN 60601-1-2.

#### **∆Warnings and Cautions**

- Using accessories other than those specified in this manual may result in increased electromagnetic emission or decreased electromagnetic immunity of the equipment.
- The device or its components should not be used adjacent to or stacked with other equipment.
- The device needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided below.
- Other devices may interfere with this device even though they meet the requirements of CISPR.
- When the inputted signal is below the minimum amplitude provided in technical specifications, erroneous measurements could result.
- Portable and mobile communication equipment may affect the performance of this device.
- Other devices that have RF transmitter or source may affect this device (e.g. cell phones, PDAs, and PCs with wireless function).

EMC table information is listed on our website:

#### https://api.viatomtech.com.cn/documents/2017/emc\_en.pdf



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