User Manual
Pulse Oximeter
SMPO1000-US

Manufactured for Smart Meter Corporation
204 S. Kennedy Blvd.
Tampa, Florida 33602

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Product Description
A Pulse Oximeter is an important and common device used to check
oxygen saturation (SpO2) and pulse rate (PR). It is a small, compact,
simple, reliable and durable physiological monitoring device. This
device contains the mainboard, OLED display and dry batteries.

Intended Use
The pulse oximeter is a reusable device, and is intended for
intermittent checks of oxygen saturation and pulse rate of adults at home or in
clinical environments. This medical device is not intended for continuous
monitoring.

Applicable people and scope
The pulse oximeter is intended for monitoring adults. It may be used
at home or in clinical settings.

Contraindications
The pulse oximeter should not be used to monitor children. It is not
suitable for use on injured skin tissue.

Safety Information
Read Instructions for use prior to using your tPulseOx.

• The pulse oximeter is only meant to assess patients’ physiological
  conditions.

• EXPLOSION HAZARD: Do not use the pulse meter in the presence of
  flammable anesthetic, explosive substances, vapors or liquids.

• Modification of the pulse oximeter is not recommended. Any product
  maintenance should be done by manufacturer-approved, professional
  maintenance personnel.

• Please shut off the power before cleaning the pulse oximeter. Disinfecting
  the pulse oximeter via high pressure and high temperature methods is
  prohibited. Any cleaning agents/instruments other than recommended
  ones listed in the operation manual are not recommended for use.

• The pulse oximeter is not waterproof. Keep its surface dry and clean.

• Avoid any pressure, jostling, strong vibrations, or other potential
  mechanical damage. Hold it carefully and lightly. If it is not in use, the
  pulse oximeter should be appropriately stored.

• Use AAA alkaline batteries.

• When possible keep the pulse oximeter away from any radio receivers
  when in use.

Product Feature
1. Simple and convenient operation with one button.
2. Compact, lightweight, and convenient to carry.
3. Battery indicator on screen.
4. Will automatically turn off after 10 seconds when there’s no signal.
5. Device data can be recorded in an EMR via cellular communication.

Battery Installation
1. Open the battery compartment as shown in figure 2.
2. Install batteries into the slots according to the “+” and “-” symbols as
   shown in figure 3. Cover the lid onto the battery compartment and
   push it upwards to make it close.

• The positive and negative ends of batteries must be installed correctly,
  otherwise the device will not work.

• When installing or removing batteries, please follow the correct
  procedure, to avoid battery compartment damage.

Installation
1. Thread the thinner end of the lanyard through the thinner end of
   the lanyard. Then, pull the thicker end of the lanyard until it’s tight.
   (as shown in Figure 3)

Battery status
1. On the display, the “Battery Status” icon will be displayed on the OLED
   screen after turning on the device.

Display Introduction
2. The power/function button is shown in figure 4 and on the lanyard
   hole. Press the button to display the data on the screen.

3. Use AAA alkaline batteries.

Finger Preparation
1. Once the data has been displayed on the screen, the cellular data
   transmission will automatically stop within 5 seconds.

Factors affecting measurement accuracy:
1. The measurements depend on absorption of special wavelength ray
   by scattered hemoglobin and deoxyhemoglobin. The concentration of
   non-hemoglobin may affect the accuracy of the measurement.

2. Shock, anemia, hypothermia, and vasodilator drugs may
decrease arterial blood flow to an unmeasurable level.

3. Pigment or deep color (ac nail polish, artificial nails, dyed, or
   pigmented cream) may cause inaccurate measurements.

Data Communication Function Description
1. Once the data has been displayed on the screen, the cellular data
   transmission will automatically stop within 5 seconds.

2. When the SpO2 reading and the PR will be uploaded in the patient record
   associated with the device serial number. The data has been transferred
   to the screen will display a message “Goodbye.” (as shown in
   Figure 10)

3. The device will automatically be powered off after a few seconds.
4. When the received signal is indiscernible, “ ---” will be
   displayed on the screen. (as shown in Figure 9)
5. Once the data has been displayed on the screen, pressing the “POWER/-
   FUNCTION” button once time, the display direction will be rotated.

NOTE:
• Check the pulse oximeter for damage before use. If it’s damaged, don’t
  use it.

• Place the patient’s finger into the product in the correct orientation, the
  LED part of the sensor should be at the backside of the patient hand. Be
  sure to insert the finger deep enough into the sensor so that the sensor
  is opposite to the light emitted from the sensor.

• Don’t move the finger and remain motionless during the process.

• Data update period is less than 30 seconds.

Cleaning and Disinfection
1. Do not immerse the device or any relevant accessories in water or
   disinfectant.

2. After cleaning, dry with a soft cloth or allow the device to dry
   naturally.

3. The recommended disinfectants include: ethanol 70%, isopropyl 70%,
   glutaraldehyde (2%) solution disinfectants.

4. After disinfection, wipe the device with a soft cloth moistened with
   one of the recommended disinfectants.

5. Leave the device to dry naturally.

Packing List

• Pulse Oximeter
   1 pc

• Zipper case
   1 pc

• Lanyard
   1 pc

• The operation manual
   1 pc

• AAA Alkaline batteries
   2 pcs

Expected service life 3 years

Technical Specifications
1. Display mode: OLED

2. SpO2:
   Range: 0~100%
   Accuracy: ±3% (70%~100%)

3. Pulse Rate:
   Range: 25~250bpm
   Accuracy: ±2bpm

4. Pulse rate accuracy has passed the verification and comparison
   with SpO2 simulator.

5. Low perfusion:
   Range: 0.5%~20%
   SpO2 accuracy: ±3% (70%~100%)
   PR accuracy: 25~250bpm, ±2bpm
5. Electrical specifications:
  Working voltage: D.C.2.2 V-D.C.3.4V
  Battery Type: Two 1.5V AAA alkaline batteries
  Power consumption: smaller than 50mA

6. Product specifications:
  Size: 58 (H) x 34 (W) x 20(D) mm
  Weight: 50g (including two AAA batteries)

7. Environmental requirements:
  Temperature:
  Operation: -15~+40°C
  Transport and storage: +10~+50°C
  Humidity:
  Operation: 15%~80%(noncondensing)
  Transport and storage: 10%~90%(noncondensing)
  Atmospheric pressure:
  Operation: 860Pa~1013Pa
  Transport and storage: 700Pa~1013Pa

NOTE:
  Wavelength: 660nm/905nm
  Output power: <0.1mW
  Operation: +5~+40°C

Power consumption: smaller than 50mA
  Working voltage: D.C.2.2 V ~ D.C.3.4V

Product specifications:
  34 (W) x 30 (D) x 71 (H) mm

Appendix A EMC Declaration

Guidance and manufacturer's declaration - electromagnetic immunity - for all EQUIPMENT and SYSTEMS

Guidance and manufacturer's declaration - electromagnetic emissions - for all EQUIPMENT and SYSTEMS

Test specifications for IMMUNITY: PORT IMMUNITY to RF wireless communications equipment

If you need additional information, please contact customer service at 1-844-445-8287.