# KETOSCAN SMART

## Multi Use Breath Analyzer



# Instruction manual

# 1 Precaution

Do not use water, alcohol or chemicals to clean device, gently wipe with dry cloth or towel.

The sensor inside the device must be replaced after 300 tests or once a year, whichever comes first.
The device will lock after 300 tests (while using device without mobile app) and 320 tests (while using mobile app). Once this happens, please buy new sensor module from the place of purchase of the device.

The accuracy of the sensor can diminish if not used for over 6 months. In this case, please buy new sensor module from the place of purchase of the device.

There can be influence to the results when drink beverage such as coffee, juice and so on excluding water and eat food or smoke or brushed the teeth (Including mouthwash) within 30 minutes before the measurement.

Consuming alcohol before testing will affect results, wait at least 24 hours for alcohol to leave your system before testing.

Consult a specialist or doctor if the test results exceed 80 ppm continuously.

# 2 Components

**KETOSCAN** SMART

Ketoscan Smart

Aluminum pack

Portable pouch
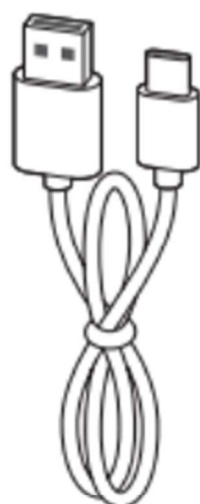
USB Type-C cable    5 pcs of mouthpieces

# **3** Product Description   KETOSCAN SMART

Exhalation outlet
(Do not block while testing)

LCD Display

USB Type-C
charging port

Power
button

Mouthpiece slot

**KETOSCAN** SMART

Replaceable
type of
Sensor module
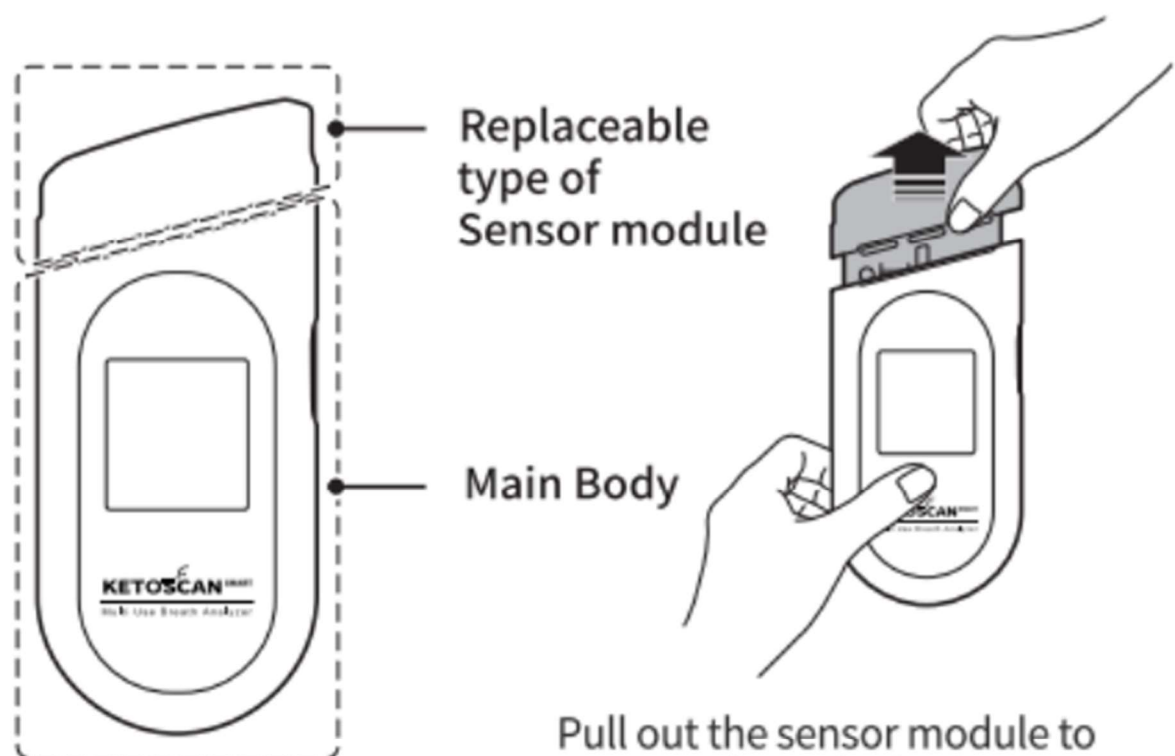
Main Body

Pull out the sensor module to
separate from the body.
**CAUTION!**
**Make sure the power off the device
before replacing the sensor module.**
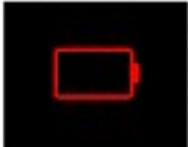
✎ **Tip:**

Align with the rail on the
right-hand side and
insert the module.

Install the module by gently
pressing downward into the
main body.

# 5 Display Message

**KETOSCAN** SMART

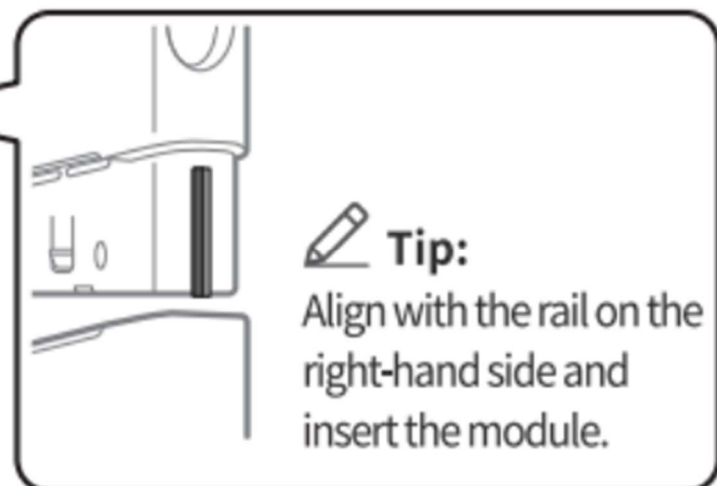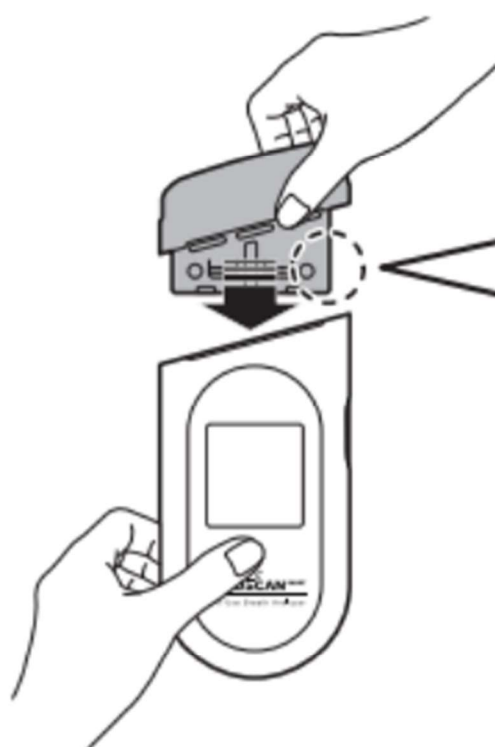| Display | Display |
|---------|---------|
| | **Breath sampling error**<br>Insufficient breath sample, wait for device and retest. |
| | **Low Battery warning**<br>Charge the device using the provided USB cable. |
| | **Battery charging**<br>Message displayed while battery is charging. |
| | **Charging complete**<br>Message displayed when battery is fully charged. |
| | **Replace Sensor module**<br>Message alert when sensor module needs to be replaced, please buy new sensor module from the place of purchase of the device. |
| | **Sensor error**<br>Message alert when sensor where sensor is damaged. please contact the place of purchase of the device. |
| | **Bluetooth® mode**<br>The device is connected with KETOSCAN app. |

**KETOSCAN** SMART

## How to Use Deivce Standalone

**1** Insert the disposable mouthpiece.

**2** Press and hold the power button for 2 seconds.

**3** complete the "sensor conditioning test" by waiting for the countdown and blowing into the device to remove any built-up residue. after the OK display appears, proceed to the "main test" after the countdown.

### Sensor conditioning test

| Caution | Waiting time countdown | Blow into device | Analyze the breath sample | Sensor conditioning test completed |
|---------|------------------------|------------------|---------------------------|-----------------------------------|

### Main test

| Waiting time countdown | Blow into device | Analyze the breath sample | Result displayed |
|------------------------|------------------|---------------------------|------------------|

## ✎ What is 'Sensor conditioning test'?

Sensor conditioning test function is a patented technology for KETOSCAN device. This function will ask you to blow into the device clearing any residue or miscellaneous gases to ensure accuracy, which is followed by the main test.

# 6-2 How to use

**KETOSCAN** SMART

## How to use Mobile Application

**1** Download app(KETOSCAN) from Google Play (Android) or App Store ( iOS).

**2** Turn on Bluetooth and location/GPS on phone.

**3** While the KETOSCAN Smart device is on, load the mobile app on your phone, press "Pair Ketoscan", and select your device from the list.

**4** Input required information and start testing.

✎ **Note**

- Reattempt after network initialization when there are many connected Bluetooth devices in case of Android device.
- Create your ID& PW to log into the App for the data storage and recall even when logging on a different mobile device over time.
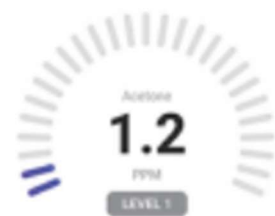
# 7 Level Guide

**KETOSCAN** SMART

**LEVEL 0 | 0.0~0.9ppm | The body fat burning rate 0 oz/hour ( 0 g/hour )**

You are not in ketosis.

Body fat is not burning. Early ketosis starts at 2ppm.

**LEVEL 1 | 1.0~1.9ppm | The body fat burning rate 0 oz/hour ( 0 g/hour )**

You are just right before ketosis.

Body fat is negligibly burning. Early ketosis starts at 2ppm.

**LEVEL 2 | 2.0~2.9ppm | The body fat burning rate 0.05 oz/hour (1.5 g/hour)**

You are at very early stage of ketosis.

Body fat has just started to burn.

Proper ketosis level starts at 5ppm.

**LEVEL 3 | 3.0~3.9ppm | The body fat burning rate 0.08 oz/hour  (2.3 g/hour)**

You are at early stage of ketosis.

Body fat is burning at a slow pace.

Proper ketosis level starts at 5 ppm.

**LEVEL 4 | 4.0~4.9ppm | The body fat burning rate 0.11 oz/hour ( 3 g/hour)**

You are at just blow proper level of ketosis.

Body fat is burning at a slow pace.

You enter Proper level at 5ppm.

**LEVEL 5 | 5.0~5.9ppm | The body fat burning rate 0.13 oz/hour (3.8 g/hour)**

You are at a reliable level of ketosis.

You are burning fat at a sub moderate pace.

Optimum level is 10ppm.

**LEVEL 6 | 6.0~6.9ppm | The body fat burning rate 0.16 oz/hour (4.5 g/hour)**

You are at a stable level of ketosis.

You are burning fat at a moderate pace.

Optimum level is 10ppm.

**LEVEL 7 | 7.0~7.9ppm | The body fat burning rate 0.19 oz/hour (5.3 g/hour)**

You are at a proper level of ketosis.

You are burning fat at a full to moderate pace.

Optimum level is 10ppm.

**LEVEL 8 | 8.0~8.9ppm | The body fat burning rate 0.21 oz/hour (6 g/hour)**

You are approaching the optimum level of ketosis.

You are burning fat at a moderate to faster pace.

Optimum level is 10ppm.

**LEVEL 9 | 9.0~9.9ppm | The body fat burning rate 0.24 oz/hour (6.8 g/hour)**

You are entering the optimum level of ketosis.

You are burning fat at an accelerated pace.

Optimum level is 10ppm.

**LEVEL 10 | 10~40ppm | The body fat burning rate 0.25 oz/hour (7 g/hour)**

You are in an optimum level of ketosis.

You are burning fat at a rapid pace. Be careful not to go over 40ppm.
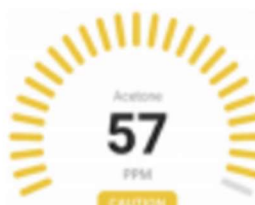
**Caution | 41~60ppm**

You are approaching an excessive level of ketosis.

You are burning fat inefficiently.

Adjust your level to under 40ppm.

**Danger | 60ppm~**

Danger! High risk level of ketosis.

There may be a serious risk to health(ketoacidosis).

Please seek medical attention.

# ✎ Note

It is possible to check the level guide at KETOSCAN dedicated app.

# 8 Product Specification  KETOSCAN SMART

| | |
|---|---|
| **Sensor Type** | High Resolution acetone gas sensor |
| **Display Unit** | PPM (Parts per million) |
| **Measurement Range** | 0.0~99 PPM |
| **Accuracy** | Less than 5ppm +/- 0.5ppm    // On or above 5ppm +/- 10% <br> *This rate is manufacturing-based and may vary depending on your environment in actual use. |
| **Battery charge cycle** | More than 50 measurements |
| **Analyzing Time** | Within 4 seconds |
| **Power Charge** | USB Type-C 5V more than 500mA |
| **Mouthpiece** | Provided disposable mouthpiece or 7mm diameter straw |
| **Sensor module replacement cycle** | 300 measurements <br> (The module is recommended for replacement every 1 year or 300 tests whichever comes first.) |
| **Storage Temperature** | 5°C ~ 50°C |
| **Operational Temperature** | 10°C ~ 40°C |
| **Certificate** | US FDA Class 1 / KC / CE / FCC |
| **Display** | 1.44-inch high brightness TFT-LCD |
| **USB-C type Connector** | The USB cable is for charging only and does not communicate data. |
| **Etc.** | Vibration motor installed for alarm |

# SENTECH GMI

## - SENTECH GMI CORP.

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## FCC compliance information

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15
of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a
residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and
used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning
the equipment off and on, the user is encouraged to try to correct the interference by one or more of the
following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution : Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement : This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 5 mm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## Limited ONE year warranty

### Warranty coverage

SENTECH GMI Corp. warrants this product against defects in materials and workmanship under normal use for a period of ONE
(1) YEAR from the date of retail purchase by the original end-user purchaser ("Warranty Period"). Except as provided in the preceding
sentence or applicable law, SENTECH GMI Corp. provides this product "as is". If a defect arises and a valid claim is received by SENTECH GMI
Corp. within the Warranty Period, at its option, SENTECH GMI Corp. will either (1) repair the product, (2) exchange the product with a product
that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original
product, or (3) refund the purchase price of the product. When a refund is given, the product for which the refund is provided must be
returned to SENTECH GMI Corp.
or Seller and becomes SENTECH GMI Corp. or Seller property. This warranty is limited to the original end-user purchaser and is not
transferable to, or enforceable by, any subsequent owner.