

bionet

# SonoMe

*Vet* bionet

Specifications

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## Characteristics

Multiple elements for better resolution: Up to 192 elements.

Various Scanning Modes : B, B/M, Color, PDI, PW modes.

Light transducers: 200-250g.

Selectable TGC control with 8 depth-dependent gain controls.

Long battery working time: 2.5-5.0 hours.

Easy to charge with USB or wireless charger. (not provided.)

Harmonic imaging to increase the image quality.

## User Interface

Only 1 press to control freeze/thaw, recall, save, gain, depth, focus, dynamic range, harmonic imaging, reject, annotations.

2 strokes to change preset, mode, measure.

Presets with optimized image settings for the scanning application.

Settings menu for DICOM settings, Information exposure, Cine Loop, Wi-Fi Channel.

Probe buttons to control freeze/thaw, depth.

No need to register when using the app.

## B-mode controls

- TGC: 8 depth-dependent gain controls
- Gain (B-mode): 76 steps (30-105dB)
- Depth: 4 steps 20-305mm
- Focus: 4 steps (The number of focus: 1-2)
- DR (Dynamic Range): 8 steps (40-110)
- HR (Harmonic): 2 steps (On and Off)
- Reject (Noise filter): 5 steps (0-4)
- Biopsy guides (In-plane, out-plane, clear)
- Image orientation change (Left/Right reverse, Up/Down reverse)

- Freeze
- Measurements
- Annotations
- Save (Still image, video)

### **Color and PDI mode controls**

- Color gain: 51 steps (0-100)
- Steer: 5 steps (-12°-+12°) (Linear)
- WF (Wall filter): 16 steps (0-15)
- PRF (Pulse Repetition Frequency): 4 steps (1.25-2.5 K)
- Freeze
- Measurements
- Annotations
- Save (Still image, video)

### **PW mode controls**

- PW gain: 51 steps (0-100)
- Volume: 3 steps (1-5mm)
- Angle: 37 steps (-85°-+85°)
- PRF (Pulse Repetition Frequency): 4 steps (1.25-2.5 K)
- Baseline: 5 settings
- Freeze
- Measurements
- Annotations
- Save (Still image, video)

## **Imaging screen display**

- Image
- Patient ID
- Patient Gender
- Patient Age
- Preset
- Transducer SSID
- Software version
- Time, date, network, battery status available on smart device

## **Data Storage**

Patient data can be entered manually or selected from DICOM Worklist.

Exam data can be exported to DICOM PACS or stored in the mobile device.

### **Exam data saved in the mobile device**

- The number of exams that can be saved depends on the capacity of the smart device.
- Image data is stored in JPEG for still images or MP4 for videos.
- Videos' cine loops: 100-200
- Data can be easily reviewed and managed in the photo album of the smart device.

### **Data export & sharing**

- Reports, still images, or videos with or without patient information can be wirelessly exported or shared in JPEG or MP4 with other apps available on smart device.
- Reports, still images, or videos with patient information can be wirelessly exported in DICOM format to DICOM PACS.

### **Supported DICOM: Worklist and Store**

## Standard Accessories

SonoMe VET transducer

SonoMe VET app (iOS and Android)

Pouch

Hardcopy quick start guide

USB charging cable

Hand strap (Only available for 5C, 10L,14L, 5CB, 10LB)

## Supported Mobile Platforms

### Operating system options

- Tablet PC or Mobile Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
- Android phone brand: Samsung, Huawei, MI

## Wireless Connectivity Parameters

Wi-Fi type: 2.4G Band

Supported type: 802.11n(HT20)

Modulation: 802.11n:OFDM

Channel number: 13 Channel for 20MHz bandwidth (2412~2472 MHz)

Channel separation: 5 MHz

# Safety Compliance

## Environmental parameters

### <Operations>

- Ambient temperature: 5°C to +35°C
- Relative humidity: 25% to 80%, non-condensing
- Atmospheric pressure: 700hPa to 1060hPa
- Max. altitude: 3000m

### <Storage and transportation>

- Ambient temperature: -20°C to +55°C
- Relative humidity: 25% to 93%, non-condensing
- Atmospheric pressure: 700hPa to 1060hPa
- Max. altitude: 3000m

## Safety Parameters

- Type of protection against electric shock
  - 5C & 5CB & 10L & 10B & 14L : Internally powered, 3.85 V DC / 4200 mAh
  - H5C10L : Internally powered, 3.85 V DC / 2800 mAh
  - H5C & H10L : Internally powered, 3.85 V DC / 5600 mAh
- Degree of protection against electric shock: Type-BF applied part
- Operation mode: Non-continuous working, Mode of operation: 1:2 duty cycle (ON: 5 min/OFF:10 min)
- Installation and operation type: Hand-held
- Degrees of protection against harmful liquid: IPX1
- Degree of safety of application: The equipment is not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide.

## Complied Standards

EN/I EC 60601-1:2012	Medical electrical equipment Part 1: General requirements for basic safety and essential performance, BF, Non-continuous operation
EN/IEC 60601-2-37: 2015	Medical Electrical Equipment Part 2-37: Particular Requirements for the Basic Safety and Essential Performance of Ultrasonic Medical Diagnostic and Monitoring Equipment
EN/IEC 60601-1-2:2014	Electromagnetic Compatibility Requirement and tests, Class A

## Transducers

### 128 Element- Black & White Transducers: 5CB and 10LB

#### SonoMe 5CB (Convex)

Overview	Element: 128 Frequency: 3.2-5 MHz Depth: 90mm- 280mm
Available Modes	B, B/M
Clinical Applications	Abdomen, Gynecology, Obstetrics
Measures	Length, Area, Angle, Obstetrics
Physical Characteristics	Dimensions: 157 x 67 x 29mm Radius: 60° Weight: 250g
Mobile Platforms	Display: Tablet PC or Mobile Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
Security and Encryption	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes
Charging and Bootup	Battery Life: 3.5 hours Charging Mode: USB Charging
Operating Range	Ambient Temperature 5°C to +35°C Relative Humidity 25% to 80%, non- condensing Atmospheric Pressure 700hPa to 1060hPa Max. Altitude 3000m

#### SonoMe 10LB (Linear)

Overview	Element: 128 Frequency:7.5- 10MHz Depth: 20mm-55mm
Available Modes	B, B/M
Clinical Applications	Peripheral vessel, Superficial organ
Measures	Length, Area, Angle, Obstetrics
Physical Characteristics	Dimensions: 157 x 67 x 29mm Head Length 40mm Weight: 200g
Mobile Platforms	Display: Tablet PC or Mobile Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
Security and Encryption	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes

Charging and Bootup	Battery Life: 3.5 hours Charging Mode: USB Charging
Operating Range	Ambient Temperature 5°C to +35°C Relative Humidity 25% to 80%, non-condensing Atmospheric Pressure 700hPa to 1060hPa Max. Altitude 3000m

## 128 Element-Color Doppler Transducers: 5C, 10L, 14L

### SonoMe 5C (Convex)

Overview	Element: 128 Frequency: 3.2-5 MHz Depth: 90mm-280mm
Available Modes	B, B/M, Color, PDI, PW
Clinical Applications	Abdomen, Gynecology, Obstetrics
Measures	Length, Area, Angle, Obstetrics
Physical Characteristics	Dimensions: 157 x 67 x 29mm Radius: 60° Weight: 250g
Mobile Platforms	Display: Tablet PC or Mobile Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
Security and Encryption	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes
Charging and Bootup	Battery Life: 3.5 hours Charging Mode: USB Charging
Operating Range	Ambient Temperature 5°C to +35°C Relative Humidity 25% to 80%, non-condensing Atmospheric Pressure 700hPa to 1060hPa Max. Altitude 3000m

### SonoMe 10L (Linear)

Overview	Element: 128 Frequency: 7.5-10 MHz Depth: 20mm-55mm
Available Modes	B, B/M, Color, PDI, PW
Clinical Applications	Peripheral vessel, Superficial organ
Measures	Length, Area, Angle, Obstetrics
Physical Characteristics	Dimensions: 157 x 67 x 29mm Head Length 40mm Weight: 200g
Mobile Platforms	Display: Tablet PC or Mobile Phone which supports iOS 8.0 or above, Android OS 7.0 or above.

<b>Security and Encryption</b>	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes
<b>Charging and Bootup</b>	Battery Life: 3.5 hours Charging Mode: USB Charging
<b>Operating Range</b>	Ambient Temperature 5°C to +35°C Relative Humidity 25% to 80%, non-condensing Atmospheric Pressure 700hPa to 1060hPa Max. Altitude 3000m

#### SonoMe 14L (Linear)

<b>Overview</b>	Element: 128 Frequency: 10-14 MHz Depth: 20mm-55mm
<b>Available Modes</b>	B, B/M, Color, PDI, PW
<b>Clinical Applications</b>	Peripheral vessel, Superficial organ
<b>Measures</b>	Length, Area, Angle, Obstetrics
<b>Physical Characteristics</b>	Dimensions: 157 x 67 x 29mm Head Length 25mm Weight: 200g
<b>Mobile Platforms</b>	Display: Tablet PC or Mobile Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
<b>Security and Encryption</b>	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes
<b>Charging and Bootup</b>	Battery Life: 3.5 hours Charging Mode: USB Charging
<b>Operating Range</b>	Ambient Temperature: 5°C to +35°C Relative Humidity: 25% to 80%, non-condensing Atmospheric Pressure: 700hPa to 1060hPa Max. Altitude: 3000m
<b>Available Accessories</b>	Needle Guides (Out of plane) - 21G 1.0cm, 1.5cm, 2.0cm

## 192 Element-Color Doppler Transducers: H5C10L, H5C, H10L

### SonoMe H5C10L (Convex-Linear Dual Head)

<b>Overview</b>	Element: 192 Frequency: 3.2-5 MHz (Convex), 7.5-10 MHz (Linear) Depth: 90mm-305mm (Convex), 20mm-80mm (Linear)
<b>Available Modes</b>	B, B/M, Color, PDI, PW
<b>Clinical Applications</b>	Abdomen, Gynecology, Obstetrics, Superficial vessel, Superficial organ
<b>Measures</b>	Length, Area, Angle, Obstetrics, Blood flow velocity
<b>Physical Characteristics</b>	Dimensions: 159 x 69 x 29mm Radius: 60° (Convex) Head Length 40mm (Linear) Weight: 250g
<b>Mobile Platforms</b>	Display: Tablet PC or Mobil Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
<b>Security and Encryption</b>	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes
<b>Charging and Bootup</b>	Battery Life: 2.5 hours Charging Mode: Wireless Charging
<b>Operating Range</b>	Ambient Temperature: 5°C to +35°C Relative Humidity: 25% to 80%, non-condensing Atmospheric Pressure: 700hPa to 1060hPa Max. Altitude: 3000m

### SonoMe H5C (Convex)

<b>Overview</b>	Element: 192 Frequency: 3.2-5 MHz Depth: 90mm-305mm
<b>Available Modes</b>	B, B/M, Color, PDI, PW
<b>Clinical Applications</b>	Abdomen, Gynecology, Obstetrics
<b>Measures</b>	Length, Area, Angle, Obstetrics, Blood flow velocity
<b>Physical Characteristics</b>	Dimensions: 160 x 70 x 23mm Radius: 60° Weight: 240g
<b>Mobile Platforms</b>	Display: Tablet PC or Mobil Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
<b>Security and Encryption</b>	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes
<b>Charging and Bootup</b>	Battery Life: 5.0 hours

	Charging Mode: USB Charging
<b>Operating Range</b>	Ambient Temperature 5°C to +35°C Relative Humidity 25% to 80%, non-condensing Atmospheric Pressure 700hPa to 1060hPa Max. Altitude 3000m

#### SonoMe H10L (Linear)

<b>Overview</b>	Element: 192 Frequency: 7.5-10 MHz Depth: 20mm-100mm
<b>Available Modes</b>	B, B/M, Color, PDI, PW
<b>Clinical Applications</b>	Peripheral vessel, Superficial organ
<b>Measures</b>	Length, Area, Angle, Obstetrics, Blood flow velocity
<b>Physical Characteristics</b>	Dimensions: 160 x 64 x 23mm Head Length: 40mm Weight: 230g
<b>Mobile Platforms</b>	Display: Tablet PC or Mobil Phone which supports iOS 8.0 or above, Android OS 7.0 or above.
<b>Security and Encryption</b>	Wi-Fi Type: 2.4G Band Supported Type: 802.11n(HT20) Local Storage: Yes DICOM: Yes
<b>Charging and Bootup</b>	Battery Life: 5.0 hours Charging Mode: USB Charging
<b>Operating Range</b>	Ambient Temperature: 5°C to +35°C Relative Humidity: 25% to 80%, non-condensing Atmospheric Pressure: 700hPa to 1060hPa Max. Altitude: 3000m

## **Headquarters**

### **Bionet Co., Ltd.**

5F, 61 Digital-ro 31-gil, Guro-gu, Seoul, Republic of Korea 08375

Tel.: +82 2 6292 6410 / E-Mail: [info.sales@ebionet.com](mailto:info.sales@ebionet.com)

Website: [www.sonome.com](http://www.sonome.com)