# **SONON** SERIES PRODUCT SPECIFICATIONS





# PRODUCT DESCRIPTION

The SONON Ultrasound Imaging System is intended for diagnostic ultrasound imaging, measurement, and analysis of the human body. Its clinical applications include musculoskeletal (MSK), vascular, small parts (breast, thyroid), and thoracic/pleural motion and fluid detection.

# **Image Quality**

The SONON products provide the high-quality imaging through Speckle Reduction Imaging Filter, digital beam forming, and GPU based digital scan conversion technologies. It is compatible with any type of mobile devices for display and operation.

# **User Friendly**

The SONON can be used with no restrictions of location, space, and time. The cable-free and light-weight device allows easy access with simple operation – for example, in specialized places such as operating room, clinical rounds, and patient check-ups.

# Mobile Technology

In normal or emergency situations SONON can use any networks, Wi-Fi, 3G, and LTE, to send still images (JPEG, DICOM) and video (MPEG4) to other mobile devices or between hospitals for smooth and fast communications.

## **Telemedicine**

Our technologies are aimed for remote service to the patient who may due to various reasons has no access to care. The system can also be utilized in medical administration, education, consultation, and other services.

\* Telemedicine is subject to change in the circumstance of each country

# **GENERAL SPECIFICATIONS**

## **Product Configuration**

- SONON Transducer
- Battery Pack (2EA)
- Main Adaptor
- Charge Adaptor
- Battery Charger
- Power Cord (2EA)
- Quick Guide

#### **Wi-Fi Network Interface**

- 2.4 / 5GHz
- AP Mode
- Auto Channel Search
- SSID: SONON 300 Serial Number

#### **Battery**

- Rechargeable Li-ion: 2600mAh/7.4V
- Changeable (Extra Battery)

## **Operating Time**

- Scan Mode: 3Hours
- Stand-by Mode: 12Hours

# **Operating System and Supported Mobile Device**

## iOS 9.0 version +

iPhone 6 Plus and newer

iPad Pro and newer

iPad Mini 4 and newer

#### Android 6.0 version +

Samsung Galaxy Tab S2, S3

Sony Experia Z4 Tablet

Nvidia SHIELD Tablet K1

# PRODUCT TYPE

# **SONON 300C**

#### **Overview**

Type : ConvexElement : 128

• Field of View: 58.2°

Frequency: 3.5MHzMax. Depth: 20cm

• Max. Frame Rate: 17

## **Dimensions and Weight**

• Width: 78mm

• Height: 38mm

• Length: 219mm

• Weight: 288g (without Battery)

\* Battery Weight: 102g

#### **Preset**

<ul> <li>Abdomen</li> </ul>	<ul> <li>Bladder</li> </ul>	
• Trauma	• Early OB	
• Late OB	• GYN	

## **Imaging Mode**

• B Mode

# **SONON 300L**

#### **Overview**

Type: LinearElement: 128

• Field of View: 4cm

• Frequency: 5 / 7.5 / 10MHz

Max. Depth: 10cmMax. Frame Rate: 20

**Dimensions and Weight** 

• Width: 78mm

• Height: 38mm

• Length: 229mm

• Weight: 268g (without Battery)

\* Battery Weight: 102g

#### **Preset**

Thyroid
Breast
WSK
Vascular
Lung
Superficial

## **Imaging Mode**

• B Mode

Color Mode

# **PRODUCT OVERVIEW**

## **Other Usage**

- Critical Care
- Hematologic Disorders
- Pulmonary Disorders
- Emergency
- Prehospital / Disaster Medicine
- Sports Medicine

## **Technology**

- Digital Beam-forming
- · Speckle Reduction Imaging Filter
- GPU digital scan conversion
- Wireless

#### **Post Processing**

- Brightness
- Contrast
- Speckle Reduction Filter
- Zoom
- Measurement (Length, Ellipse, Angle, Volume, Fetal Biometry)
- Text
- Delete

#### **Scanning Parameters**

- Gain: 0~100%
- Dynamic Range: 30~96 dB
- Time Gain Compensator : 4 Areas
- Frame Average : 4 selections
- Speckle Reduction Filter: 6 selections
- Focus : Single (300C), Multi (300L)
- Focus Position
- Image Reverse : Right/Left
- C Invert
- C Angle Steer
- C box Size
- Flow Speed
- C Gain
- C Rejection
- Acoustic Power :
  - Mechanical Index (MI)
  - Thermal Index (TI): TIB, TIC, TIS

# **DATA MANAGEMENT**

## **Image Archive**

- Length, Ellipse, Angle, Volume, Fetal Biometry
- Image Scroll Review
- Image Format : JPEG, DICOM

#### **Cine Archive**

- Cine Store: 36sec (70MB)
- Play, Stop, Image Scroll Review
- Image Format : MPEG, DICOM

# **DISPLAY ANNOTATION**

## **Display**

- Patient ID
- Patient Name
- Probe Orientation
- Depth Scale Marker
- Focus Position Marker
- Image Depth
- Cine Gage (Image Number/Frame Number)
- MI : Mechanical Index
- Acoustic Output
  - TIS: Thermal Index Soft Tissue
  - TIC: Thermal Index Cranial
  - TIB: Thermal Index Bone

- Frame per Sec
- Brightness
- Contrast
- Time Gain Compensator
- Measurement
- Delete
- Freeze / Unfreeze
- Text
- Battery Capacity

# **MEASUREMENT AND CALCULATION**

#### Measurement

Length Ellipse	
• Area	
• Angle	
• Volume	

#### **Fetal Biometry**

• BPD	• HC
• FL	• AC
• CRL	• EFW

# **SAFETY CONFORMANCE**

- IEC 60601-1 Electrical Medical Equipment
- IEC 60601-1-2 Electromagnetic Compatibility
- IEC 60601-1-6 Usability
- IEC 62304 Software Life Cycle Processes
- IEC 60601-2-37 Particular Requirements for the Safety of Ultrasound Medical Diagnostic and Monitoring Equipment
- IEC 62359 Ultrasonics Field Characterization Test Methods for the Determination of Thermal and Mechanical Indices Related to Medical Diagnostic Ultrasonic Fields
- ISO 10993 Biological Evaluation of Medical Devices

## **Healcerion's Story**

Leveraging mobile technology, Healcerion brings affordable, high-quality medical care to clinical and remote locations around the world. Healcerion offers a mobile-based healthcare system that is specifically designed to provide physicians and patients with flexibility and portability. Founded in 2012 by a healthcare provider, Healcerion understands the importance of accurate, timely diagnostic testing results. Healcerion is committed in delivering clinical information to ensure superior patient care and increased satisfaction for both patients and healthcare providers.

Healcerion has received numerous awards and achievements. We are positioned to become a leading mobile healthcare provider which improves remote medical information and services. Our vision for the future includes welcoming everyone to join us in making the world a better place.



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