



## SPARK®

Point of Care Ultrasound for Superficial Applications  
such as Musculoskeletal, Skin, and Breast



*The affordable approach to ultra-high resolution  
and deep penetration of the superficial layer.*

### CHALLENGE

How many times in your practice have you wished that there was a way for you to run a quick scan of something in a patient's superficial layer? How many times have you suspected that a patient had torn cartilage in their knee, a dislocation of a thumb or shoulder, or an early-stage growth on a breast or testicle? Instead of being able to confirm your suspicion on the spot, you were forced to delay diagnosis and treatment while the patient scheduled and underwent comprehensive imaging—often times to confirm what you already knew.

High quality ultrasound for superficial applications have to this point been unaffordable and impractical for Point of Care practices. Requiring large pieces of proprietary equipment and systems, these systems have been cost prohibitive. Until now.

### SOLUTION

Spark® is a vital breakthrough in Point of Care imaging for superficial structures. Offering unprecedented sensitivity and ultra-high resolution not found on traditional units 10x or more its price point, Spark is revolutionizing ultrasound for front-line physicians with its performance, price, and value. Highly portable, adaptable, and upgradeable, Spark is powered by a standard PC or laptop and can rapidly integrate with your Patient Information System. Spark is a standardized interface peripheral device that connects to your PC via a standard USB connection; it's as easy to install as connecting a mouse (and almost as simple to use).



## WE CALL IT "PLUG AND KNOW"

- 1 ..... Simply attach the Interface to your computer via a Standard USB (Universal Serial Bus) cable
- 2 ..... Automatically install the software Suite from a CD-ROM
- 3 ..... Immediately gain deeper insights into your patients' condition to improve and accelerate your decision making and/or treatment at the Point of Care



Wide interoperability via USB 2.0

## Features and Benefits

### Excellent Image Quality

- Superb Detail and Contrast Resolution
- Wide Bandwidth Architecture
- ArdentView Image Filters
- Capable of imaging from 5.0MHz - 21MHz (transducer dependent)
- High Frame Rate: up to 139fps

### Research

- Human: RF Out Capabilities
- Small Animal:
  - RF Out Capabilities
  - 1KHz M-Mode PRF

### Clinical Utility

#### Superficial Structures

- High Frequency Linear: 5mm - 30mm
- 12MHz Linear Array: 15mm - 45mm

## Technical Specifications

### Physical Characteristics

- Height: 10.75 in (273 mm)
- Width: 4.75 in (121 mm)
- Length: 19.00 in (483 mm)
- Weight: 22 lbs (10 kg)

### Transducer Options

- 5.0 - 8.0 MHz Convex Endo
- 9.0 - 14.0 MHz Linear Array
- 14.0 - 21.0 MHz Linear Array

### Imaging Modes

- B-Mode
- B-M Mode
- M Mode
- Zoom (Pan)

### Measurement Tools

- Distance
- Circumference
- Area
- Volume
- Beats/Minute (m-mode)

### Image Storage & Cine

- Dicom Compatible
- Stores Images and Cine as Raw Data
  - Export Images as bmp or jpg
  - Export Cine as AVI
- Back-up Database to internal or external Hard Drive, CD, DVD or Network

Power: 100-240 VAC  
50-60 Hz input

### Minimum Computer Requirements

Windows XP OS: USB 2.0 Port, 256 MB RAM, 1 GB Available Hard Drive Space

Windows7/ Vista OS: USB 2.0 Port, 500 MB RAM, >1 GHz Duo-Core Processor\*, 1 GB Available Hard Drive Space

\*assumes Windows7/ Vista Home OS.  
More Advanced Versions of Vista may require a faster processor and more RAM

## CONTACT INFO

To learn more or purchase Spark, please contact Ardent Sound at 480-649-1806 or [sales@ardentsound.com](mailto:sales@ardentsound.com).



Ardent Sound, Inc.  
33 S. Sycamore St. Mesa, AZ 85202-1150 USA  
Tel: 1-480-649-1806 Fax: 1-480-649-1605 | [www.ardentsound.com](http://www.ardentsound.com)

Protected by US Patents: 6440071, 6049159, 6120452, 6213948 others pending