Hologic has partnered with SuperSonic Imagine to bring you a next generation ultrasound system optimized for breast imaging. The Aixplorer® system offers a cutting edge ergonomic design, intuitive control and touch panels, and ultra lightweight transducers and cable as just some of the innovative design features incorporated to optimize the way you work.

The Aixplorer system gives you impeccable image quality with a unique breast imaging application, MultiWave Imaging with ShearWave™ elastography. It’s another outstanding technology to help aid in the early detection and diagnosis of breast cancer to save more women’s lives.
### Aixplorer® MultiWave™ Ultrasound System Specifications

#### Hardware
- **Intel® Core™ i7 processor**
  - 2.8 GHz core speed
  - 4 cores with 8 parallel processing threads
  - 12 GB of on-board RAM
- NVIDIA GeForce 285 GTX graphics processor
- WorkStation Class Motherboard
- 256 x 256 imaging channels
- DVI Splitter
- Optional 3D Hardware motor controller

#### Software
- 64-bit Linux based Operating System, Debian derived
- SonicSoftware™ Beamforming and Scan Conversion
- UltraFast™ Imaging for ShearWave™ Elastography:
  - Up to 20000 frames per second acquisition
- Data transfer rate: > 3 Gbytes/second

#### Performance
- Cold Boot-up time: < 90 seconds
- Shut down time: < 20 seconds
- Transducer select time (typical): < 2 sec
- Data access time: < 1 sec

#### Control Panel
- Vertical adjustment: 84 to 98 cm
- ± 45° swivel articulation
- Center trackball with TouchRing™

#### Electrical/ Environmental Specifications
**Dual Switching Power Supply**
- Power consumption:
  - 100-120 VAC, 50 Hz / 60 Hz, 1500 W
  - 220-240 VAC 50 Hz / 60 Hz, 1500 W
- Temperature Workload >> 5118 BTU
- Temperature Range:
  - Operating: 10-35°C (50-95°F)
  - Storage: -20–50°C (-4–120°F)
- Humidity Range:
  - Operating: 30-80%; Storage: 30-80%
- Pressure Range:
  - Operating: 525-795 mmHg;
  - Storage: 375–795 mmHg

#### Flat-Panel Display and Articulating Arm
- 20.1” (51 cm) EIZO FlexScan LCD Flat Panel Display
- Ultra-wide viewing angle: ± 178°
- Pixel-sharp high resolution: 1680x1050
- Dot Pitch 0.258 mm x 0.258 mm
- Display Colors 16.77 million colors
- Contrast Ratio: 900:1
- Brightness: 300 cd/m2
- Response time: 8 ms
- Interactive 10 ¾” Touch Screen
  - Resolution: 1024 x 768
  - Mounted on fully articulated arm
  - Touch-sensitive on-screen keyboard
  - Support for 7 language keyboard types
- Overall height 168 cm (66”)
  - Monitor folded down height 129 cm (51”)

#### Advanced User Interface Features
- Interactive Body Markers
- TouchRing™ trackball surround
- SuperKey: Programmable key control

#### Imaging Modes and Processing Options
- Total Dynamic Range (across all modes): 200 dB
- Total Processing Channels: 65000
  - Transmit channels: 256
  - Receive channels: 128

#### B-mode Imaging:
- Broadband frequency transmit and receive on all transducers

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### Transducers

<table>
<thead>
<tr>
<th></th>
<th>SL15-4 50 mm Super Linear Array (standard)</th>
<th>SC6-1 64 mm Super Curved Array (standard)</th>
<th>SE12-3 138° Super Endocavity (standard)</th>
<th>SLV16-5 38mm Super Linear Volumetric (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composite elements</strong></td>
<td>256</td>
<td>192</td>
<td>192</td>
<td>192</td>
</tr>
<tr>
<td><strong>Effective bandwidth</strong></td>
<td>4 MHz to 15 MHz</td>
<td>1 MHz to 6 MHz</td>
<td>3 MHz to 12 MHz</td>
<td>5 MHz to 16 MHz</td>
</tr>
<tr>
<td><strong>Transducer footprint</strong></td>
<td>51 mm</td>
<td>64 mm</td>
<td>28 mm</td>
<td>Acoustic footprint: 38 mm x 43 mm (@ 30 degrees)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>116 grams</td>
<td>122 grams</td>
<td>220 grams</td>
<td>310 grams</td>
</tr>
<tr>
<td><strong>Cable Length</strong></td>
<td>2.1 meter</td>
<td>2.1 meter</td>
<td>2.1 meter</td>
<td>2.1 meter</td>
</tr>
</tbody>
</table>
### Color Flow Imaging (CFI), Color Power Imaging (CPI), and Directional Color Power Imaging (dCPI)

<table>
<thead>
<tr>
<th></th>
<th>SL15-4 50 mm Super Linear Array (standard)</th>
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<th>SLV16-5 38mm Super Linear Volumetric (standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fundamental Imaging</strong></td>
<td>7.5 - 15 MHz</td>
<td>2.5 - 5 MHz</td>
<td>4.5 - 9 MHz</td>
<td>5 - 16 MHz</td>
</tr>
<tr>
<td><strong>Harmonic Imaging</strong></td>
<td>Transmit 4.5 - 5.625 MHz</td>
<td>Transmit 1.0 - 3.0 MHz</td>
<td>Transmit 3 - 4.5 MHz</td>
<td>Transmit 4.5 - 5.625 MHz</td>
</tr>
<tr>
<td></td>
<td>Receive 9 - 11.25 MHz</td>
<td>Receive 2.0 - 6.0 MHz</td>
<td>Receive 6 - 9 MHz</td>
<td>Receive 9 - 11.25 MHz</td>
</tr>
<tr>
<td><strong>Overall Bandwidth</strong></td>
<td>90% of transmit frequency</td>
<td>90% of transmit frequency</td>
<td>90% of transmit frequency</td>
<td>90% of transmit frequency</td>
</tr>
<tr>
<td><strong>Axial Resolution</strong></td>
<td>@ -6 dB: 0.3 mm</td>
<td>@ -6 dB: 1.1 mm</td>
<td>@ -6 dB: 0.3 mm</td>
<td>@ -6 dB: 0.3 mm</td>
</tr>
<tr>
<td><strong>Lateral Resolution</strong></td>
<td>@ -6 dB: 0.3 mm</td>
<td>@ -6 dB: 1.2 mm</td>
<td>@ -6 dB: 0.3 mm</td>
<td>@ -6 dB: 0.3 mm</td>
</tr>
<tr>
<td><strong>Line Density (max)</strong></td>
<td>5 lines/mm</td>
<td>5 lines/mm</td>
<td>5 lines/mm</td>
<td>5 lines/mm</td>
</tr>
<tr>
<td><strong>Display Depth</strong></td>
<td>8 cm</td>
<td>30 cm</td>
<td>12 cm</td>
<td>8 cm</td>
</tr>
</tbody>
</table>

**Color Gain:** 58 dB  
**Dynamic Range:** 12 - 38 dB (60 dB max)  
**PRF Range:** 260 - 16800 Hz  
**Color Wall Filters:** 4 levels  
**Color Smoothing:** 7 levels  
**Color Persistence:** 4 levels  
**Color/B-mode Priority Levels:** 0-100%

**Color Display Options:**  
- Color Blending  
- Color Flash Suppression  
- Color Zoom  
- Color Invert  
- Hide/Show Color display

**Color Maps:** 8 (CFI), 8 (CPI)  
**Focal Zone:** Auto set to color box, independent of 2D focal zone  
**Focal positions:** Up to 8  
**Steering angle:** -20° to 20° in 5° increments

### Data Management
- Hard disk capacity: 320 Gb x 2  
- Image storage: 20000 images (estimated)  
- Study storage: 2000 typical studies (10 images and data)  
- DICOM print, store, query and retrieve  
- Patient Privacy Features

### Peripherals & Ports
- Printer:  
  - Thermal image printers supported:  
    - Sony Black & White model UP-897  
    - Sony Color model UP-D25MD  
    - Integrated 28x DVD/CD read/write player/burner

### Available Options
- SonicResearch™ Package  
- Footswitch  
- 3D Imaging

www.hologic.com
Aixplorer® MultiWave™ Ultrasound System

An Innovation in Breast Ultrasound Imaging

Physical System Specifications

**Height:**
168 cm (66") with monitor fully raised; 129 cm (51") with monitor locked

**Width:** 61 cm (24”)

**Depth:** 112 cm (44”)

**Weight:** ~100kg (220 lb), depending on the peripheral devices installed

To learn more about the Aixplorer system please contact your Hologic account manager, call 781.999.7453 or email womenshealth@hologic.com