Capture quality video clips up to 60 seconds long

Backlit keyboard is easier on the eyes

Battery-powered and wireless capabilities for true mobility

PC- and Mac-friendly for effortless data management with 2 high-speed USB 2.0 ports

Magnesium case for lightweight strength

Weighs 7.5 lbs./3.4 kg with battery

**AT A GLANCE**

- Premium image quality
- Drop tested at 3 feet/91.4 cm
- Splash resistant user interface
- Quick boot-up time
- Easy to operate
- No annual service contract
High Resolution Imaging Across the Point of Care

Engineered for striking image quality, durability and ease of use, the M-Turbo® ultrasound system, has earned customer satisfaction ratings of 99%*. Proprietary algorithms optimize multiple imaging parameters so you get essential information quickly and easily.

Turbo Technology

**SonoADAPT™ Tissue Optimization** – eliminating complicated manipulation of multiple controls.

**SonoHD™ Imaging Technology** – reducing speckle noise and other image artifacts while preserving and sharpening tissue information.

**SonoMB™ Multi-beam Imaging** – increasing resolution of small structures and enhancing border delineation.

**Advanced Needle Visualization** – aiding needle visualization while maintaining striking image quality of the target and surrounding anatomy.

**ColorHD™ Technology** – increasing color performance, sensitivity and frame rates for more diagnostic information.

**Point-of-Care Applications**

Anesthesia, Critical Care, Cardiology, Cardiovascular Disease Management, Emergency Medicine, Musculoskeletal, OB/Gyn, Radiology, Vascular, Surgery, Vet Imaging, Women’s Health

*Verispan surveys 2008*
<table>
<thead>
<tr>
<th>Transducer</th>
<th>Frequency</th>
<th>Applications</th>
<th>Scan Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>L38xi</td>
<td>10-5 MHz</td>
<td>Linear</td>
<td>9 cm</td>
</tr>
<tr>
<td>HFL38x</td>
<td>13-6 MHz</td>
<td>Linear</td>
<td>6 cm</td>
</tr>
<tr>
<td>HFL50x</td>
<td>15-6 MHz</td>
<td>Linear</td>
<td>6 cm</td>
</tr>
<tr>
<td>L25x</td>
<td>13-6 MHz</td>
<td>Linear</td>
<td>6 cm</td>
</tr>
<tr>
<td>C8x</td>
<td>8-5 MHz</td>
<td>Curved</td>
<td>11.5 cm</td>
</tr>
<tr>
<td>C11x</td>
<td>8-5 MHz</td>
<td>Curved</td>
<td>10 cm</td>
</tr>
<tr>
<td>C60xi</td>
<td>5-2 MHz</td>
<td>Curved</td>
<td>30 cm</td>
</tr>
<tr>
<td>ICTx</td>
<td>8-5 MHz</td>
<td>Curved</td>
<td>13 cm</td>
</tr>
<tr>
<td>P21x</td>
<td>5-1 MHz</td>
<td>Phased</td>
<td>35 cm</td>
</tr>
<tr>
<td>P10x</td>
<td>8-4 MHz</td>
<td>Phased</td>
<td>14 cm</td>
</tr>
<tr>
<td>SLAx</td>
<td>13-6 MHz</td>
<td>Linear</td>
<td>6 cm</td>
</tr>
<tr>
<td>TEEsi</td>
<td>8-3 MHz</td>
<td>Multi</td>
<td>18 cm</td>
</tr>
</tbody>
</table>

Needle guide kits available with the following transducers – L38xi, HFL38x, HFL50x, C8x, C60xi, ICTx, P10x and P21x. A transverse needle guide is available with the L25x transducer.
**SYSTEM SPECIFICATIONS**

System weight: 7.5 lbs/3.4 kg with battery  
Dimensions: 11.9” x 10.8” x 3.1” / 30.2 cm x 27.4 cm x 7.9 cm (L x W x H)  
Display: 10.4”/26.4 cm diagonal LCD (NTSC or PAL)  
Architecture: All-digital broadband  
Dynamic range: Up to 165 dB  
Gray scale: 256 shades  
HIPAA compliance: Comprehensive tool set

**IMAGING MODES**

Broadband, Multifrequency Imaging: 2D / Tissue Harmonic Imaging / M-Mode  
Velocity Color Doppler / Color Power Doppler  
PW, PW Tissue Doppler and CW  
Doppler angle, correct after freeze

**IMAGE PROCESSING**

SonoADAPT™ Tissue Optimization  
SonoHD™ Imaging Technology  
Advanced Needle Visualization (SonoMBE™ Imaging)  
Dual Imaging, Duplex Imaging, 2x pan/zoom capability, Dynamic range and gain

**USER INTERFACE AND REMAPPABLE CONTROLS**

Softkeys to drive advanced features  
Programmable A and B keys: each can be assigned by the user for increased ease of use  
Alphanumeric elastomeric QWERTY keyboard  
Trackpad with select key for easy operation and navigation  
Doppler controls: angle, steer, scale, baseline, gain and volume  
Image acquisition keys: review, report, Clip Store, save Dedicated AutoGain and exam keys to allow quick activation

**TRANSDUCERS**

Broadband and Multifrequency: Linear Array, Curved Array, Phased Array, Multplane TEE and Micro-Convex  
Single Frequency: Cardiac Static Pencil

**DURABILITY**

Drop-tested at 3 feet/91.4 cm

**APPLICATION SPECIFIC CALCULATIONS**

OB/GYN: Fertility; Diameter/ellipse measurements, volume, ten follicle measurements, estimated fetal weight, established due date, gestational age, last menstrual period, growth charts, user-defined tables, multiple user-selectable authors, ratios, amniotic fluid index, patient report, humerus and tibia measurement and charts  
Vascular: Diameter/ellipse/trace measurements, volume, volume flow, percent diameter and area reduction, L/Rt CCA, ICA, ECA, ICA/CCA ratio, time average mean (TAM), peak trace, ICA/CCA ratio, angle correction, patient report  
CMIT (Carotid Intima Media Thickness): Embedded SonoCalc® IMT software (optional) – automated edge detection with mean and maximum thickness reporting  
Cardiac: Automated Cardiac Output package and patient report including: ventricular, aortic and atrial measurements; ejection fraction, volume measurements, Simpson’s rule, continuity equation, pressure half-time and cardiac output; PA AT, TV E, A, PHT, TVI, MV time, Pulm Veins  
Transcranial Doppler (TCD): Complete TCD package including Time Average Peak (TAP)

**ONBOARD IMAGE AND CLIP ANNOTATIONS/REVIEW**

16 GB encrypted, internal Flash memory storage capability. Potential to store 40,000 images or 1900 2-second clips  
Clip Store capability (maximum single clip length: 60 seconds)  
Clip Store capability via either number of heart cycles (using the ECG) or time base Maximum storage in ECG beats mode is 10 heart cycles. Maximum storage in time base mode is 60 seconds  
Cine review up to 255 frame-by-frame images

**MEASUREMENT TOOLS, PICTOGRAMS AND ANNOTATIONS**

2D: Distance calipers, ellipse and manual trace  
Doppler: Velocity measurements, pressure half time, auto and manual trace  
M-Mode: Distance and time measurements, heart rate calculation  
User-selectable text and pictograms  
User-defined, application-specific annotations  
Biopsy guidelines

**EXTERNAL DATA MANAGEMENT**

Q-path ultrasound management system  
DICOM® Image Management (TCP/IP): Print and Store, Modality Work List, Storage Commit, Modality, Perform, Procedure Step  
PC Workstation Image Management (TCP/IP, USB): SiteLink™ – allows transfer, archiving, viewing and printing of high resolution bitmap images/clips, and batch compression to JPEG on PCs  
Direct writing capability to USB 2.0 mass storage removable media (PC and MAC compatible)  
Supported export formats: MPEG-4 (H.264), JPEG, BMP, and HTML

**CONNECTIVITY**

S-video (in/out) to VCR for record and playback  
DVI output  
Composite video output (NTSC/PAL) to VCR or video printer  
Audio output  
Integrated speakers  
Ethernet or wireless image/data transfer  
USB ports (2)  
RS-232 transfer

**POWER SUPPLY**

System operates via battery or AC power  
Rechargeable lithium-ion battery AC: universal power adapter, 100-240 VAC, 50/60 Hz input, 15 VDC output

**EXTERNAL VIDEO AND AUDIO**

S-video (in/out) to VCR or DVD for record and playback  
RGB or DVI output to external LCD display  
Composite video output (NTSC/PAL) to VCR or DVD, video printer or external LCD display  
Audio output  
Integrated speakers

**H-UNIVERSAL™ STAND AND PERIPHERALS**

Transducer and gel holders  
Optional Triple Transducer Connect (TTC) to quickly activate transducers electronically  
Optional foot switch  
Optional PowerPark and PowerPack

**OPTIONAL PERIPHERALS**

Printers: Medical-grade black and white or color  
External storage devices: Medical-grade DVD  
External data input devices: Bar code reader  
ECG module: 3-Lead ECG – works with standard ECG leads and electrodes  
External analog ECG input also available  
USB bar code reader