

System Specifications:

System weight	3.04 kg
Dimensions	30.2 cm L x 27.4 cm W x 7.9 cm H
Display	26.4 cm diagonal LCD (NTSC or PAL)
Architecture	All-digital broadband
Number of channels	128 channels
Dynamic range	Up to 165 dB
Gray scale	256 shades
HIPAA compliance	Comprehensive tool set

Imaging Modes and Processing:

Broadband, multifrequency imaging:
 2D / Tissue Harmonic Imaging / M-mode
 Velocity Colour Doppler / Colour Power Doppler
 PW, PW Tissue Doppler and CW

Image processing:

SonoADAPT™ Tissue Optimisation
 SonoHD™ Imaging Technology
 SonoMB™ Multi-beam Technology
 Dual imaging
 Duplex imaging
 2x pan/zoom capability
 Dynamic range and gain

Transducers:

Broadband and multifrequency:
 Linear Array, Curved Array, Phased Array, Multiplane TOE/TEE and Micro-Convex
 Single frequency:
 Cardiac Static Pencil

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 QWERTY keyboard
- Track pad with select key for easy operation and navigation
- Doppler controls: angle, steer, scale, baseline, gain and volume
- Image acquisition keys: review, report, VCR, Clip Store, DVD, save
- Dedicated AutoGain and exam keys to allow quick activation

Application Specific Calculations:

OB/Gyn/Fertility:

Diameter/ellipse measurements, volume, six follicle measurements, estimated foetal weight, established due date, gestational age, last menstrual period, growth charts, user-defined tables, multiple user-selectable authors, ratios, amniotic fluid index, patient report

Vascular:

Diameter/ellipse/trace measurements, volume, volume flow, percent diameter and area reduction, Lt/Rt CCA, ICA, ECA, ICA/CCA ratio, time average mean (TAM), peak trace, ICA/CCA ratio, angle correction, patient report

IMT (Intima Media Thickness):

Embedded SonoCalc® IMT software (optional) – automatic edge detection with mean and maximum thickness reporting

Cardiac:

Complete cardiac calculations 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 Storage/Review:

8GB internal Flash memory storage capability

Potential to store 64,000 images or 1,066 2-second clips

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

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 Data Management and Wireless:

DICOM® Image Management (TCP/IP):

Print and Store
 Modality Work List

PC Workstation Image Management (TCP/IP, USB or Flashcard reader):

SiteLink™ Image Manager – 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 are: MPEG4 (H.264), JPEG, BMP, and HTML

Wireless Solutions:

SonoRoam™ Technology with 802.11 b/g USB wireless adapter
 SonoRemote™ Control – Bluetooth® wireless technology

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 Video and Audio (requires an MDSm, MDS Lite or separate minidock):

- 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

Mobile Docking Stations (MDS) and Peripherals:

MDSm – Convenient Workstation:

- Storage for fully integrated printer or DVD
- Transducer holder and storage
- Optional Triple Transducer Connect (TTC) allows the user to quickly activate transducers electronically
- Optional foot switch
- Optional 38 cm (diagonal) DVI monitor

MDS Lite – Convenient Workstation:

- Storage for fully integrated printer or DVD
- Transducer holder and storage
- Optional Triple Transducer Connect allows the user to quickly activate transducers electronically
- Optional foot switch

Printers: Medical-grade black and white or colour


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

The M-Turbo® ultrasound system offers a range of transducers with broadband signal processing capabilities to access critical diagnostic information and provide procedural guidance across multiple clinical applications. M-Turbo transducers are compatible with the specialised S Series™ of products. With a fluid resistant membrane for safe cleaning, and the ability to  withstand the impact of a 1 metre drop, you can depend on the M-Turbo and S Series systems in the most demanding of situations and environments. Both systems are covered by the same industry-leading 5-year warranty.

Transducer	Applications	Bandwidth	Scan Depths	Biopsy Kit
L38x 	Breast, small parts, vascular, IMT, nerve, venous	10-5 MHz 38-mm broadband linear array	9 cm	Available
HFL38x 	Breast, small parts, vascular, musculoskeletal, IMT, nerve, venous	13-6 MHz 38-mm broadband linear array	6 cm	Available
L25x 	Musculoskeletal, vascular, nerve, superficial, venous, ophthalmic	13-6 MHz 25-mm broadband linear array	6 cm	Transverse Guide Available
C11x 	Abdominal, neonatal, nerve, vascular	8-5 MHz 11-mm broadband curved array	10 cm	NA
C60x 	OB, gyn, abdominal, nerve	5-2 MHz 60-mm broadband curved array	30 cm	Available
ICTx 	OB, gyn	8-5 MHz 11-mm broadband tightly curved array	10 cm	Available
P21x 	Abdominal, OB, cardiology, TCD, orbital	5-1 MHz 21-mm broadband phased array	35 cm	N/A
P10x 	Paediatric cardiology, abdominal, neonatal head	8-4 MHz 10-mm broadband phased array	14 cm	Available
SLAx 	Vascular, musculoskeletal, venous superficial, nerve	13-6 MHz 25-mm broadband linear array	6 cm	NA
TOEx/TEEx 	Adult cardiology	8-3 MHz Multiplane transoesophageal 180 degree rotation of the imaging plane, providing a 360 degree field of view	18 cm	NA
D2x 	Cardiology (CW)	2 MHz Pencil Transducer, Pedof CW	NA	NA