MyLabDelta

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Product Description

MyLabDelta ultrasound imaging system has been designed for the following species and applications:

- Canine
- Feline
- Equine
- Bovine
- Porcine
- Caprine
- Other

- Abdomen
- Cardiac
- Tendon
- Reproduction

System Configuration

- LCD Main Screen with ±90° up/down movement
- Complete and back-illuminated control panel
- Color LCD touch screen with additional controls and mode-depending keys
- 2 active probe connectors
- Integrated cooling system with very silent fans
- Cart* with:
- Ergonomic and compact design for easy maneuverability
- Four multidirectional wheels with breaking mechanism
- Pedal for easy regulation of the height of the console-keyboard
- Vertical displacement: ±30 cm
- On Board location for peripherals storage
- 3 ports Multiconnector (optional)

- Fixed and protected transducer holders
- Movable Gel & ECG cable holders
- Movable Transducer cables supports

*from June 2016

Control panel

- LEDs Brightness Digital adjustment
- Ergonomic Key Layout
- Ergonomic and adjustable back lighting control panel
- Primary controls easily accessible and logically grouped
- Programmable keys
- eTouch: Macro Recorder
- Trackball with two keys and action key - PC mouse logic
- Dedicated buttons to activate primary modalities:
  B-Mode
  M-Mode
  CFM
  PW
  CW
- Direct multifunction knob to activate and control primary modalities:
  Imaging Gain
  Doppler Gain
- Dedicated key for:
  System ON/OFF
  End exam
  General Setup Menu
  Archive
  eTouch
  Application Measure
  Generic Measurement
  Line/Update (in Split modes)
  Dual Imaging
  Image/Clip Storage
  Peripherals remote control
  AutoAdjust
  Near and Far gain

8 TGC slide controls in touch screen
Integrated Loudspeakers

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Touch screen

- Resolution: 1024x600px
- Brightness Digital Adjustment
  - Dimension: 19.5x11.8cm (7.7x4.6inch) – Wide Screen 15/9 – 8.9"
  - Tools activation
  - Physio (ECG signal) Exam Review
  - Reverse
  - Orientation
  - Duplex/Triplex (in Split modes)
  - XView
  - MView
  - Gray Map
  - TPView
  - Power
  - Color Map
  - ADM: Automatic Doppler Measurements
  - B-Ref (for Split modes)
  - B-Ref/Trace representation format
  - Special functions buttons
  - 6 direct toggles for Software Keys (up to 2 layers)
  - Multilanguage Alphanumeric keyboard (US International, Italian, Danish, Norwegian, French, Swedish, German, Russian, Spanish)

Monitor

- 13.3" Wide Screen 15/9 LCD monitor
- Screen Resolution: 1280x800px
- Dimension: 28.9x18.1cm
- Image Resolution: 860x600px
- Brightness Digital adjustment
- Information on Monitor
  - Application
  - Selected Preset
  - Date & Hour
  - Type of probe
  - Probe Orientation

  - Operating Frequency Range
  - Selected Central Frequency Range
  - Acoustic Power Output
  - Gray Map
  - Dynamic Range
  - Compression
  - Persistence
  - Enhancement
  - XView
  - MView
  - Depth
  - Focus (position/number)
  - Doppler Angle
  - CFM & Spectral Doppler Filter
  - Sample Volume Size and depth
  - Frame Rate
  - PRF
  - Gain 2D, CFM, PW/CW
  - Animal Data
  - Owner Data
  - Body Markers
  - Remote Digital Printing and Storage Status
  - Remote Dicom Storage Status
  - TEE Probe Position Angle
  - TEE Probe Temperature
  - Heart Rate
  - Timer
  - Sweep time indication on trace
  - Trackball action function
  - Icons for XView, AutoAdjust, MView, Battery, Peripherals, Media Storage options and Networks

SYSTEM OVERVIEW

Operative Modes

- B-Mode (2D)
- Colorize 2D, M-Mode and PW/CW
- PW/CW Doppler
- Non Imaging CW

- CFM (Color Doppler)
- Power Doppler
- Directional Power Doppler (VeloPower)
- XFlow
- TEI (Tissue Enhancement Imaging)
- ECG
- CMM (Compass M – Mode)
- TVM (Tissue Velocity Mapping)
- TPView
- MView on linear and convex probes
- VPan (Panoramic View)

Image Display Modes

- 256 gray levels or B-color levels
- Orientation: Left / Right, Up / Down
- Real Time Triplex mode (2D+CFM+PW)
- 2D+2D (w or w/o CFM or PWR_D)
- 2D+M-Mode (update or Real time Duplex)
- 2D+CFM+M-Mode (update)
- 2D+Doppler (update or Real time Duplex)
- 2D+ CFM+Doppler (update or Real time Triplex)
- 2D+PWR_D/VeloPower
- 2D+PWR_D/VeloPower+ Doppler (update or Real time Triplex)
- 2D+TVM
- 2D+TV
- 2D+TVM+(M-Mode or PW)
- 2D+TVM+TV
- Colorize on all combinations

Formats

- Imaging
  - Full / Split / Multiple
  - Left-Right / Up-Down
- Tracings
  - Split / Dual (scroll by line)
- CFM – Color On/Off in Freeze

Transducer Types

- Multifrequency Electronic Convex Array
- Multifrequency Electronic Linear Array
- Multifrequency Electronic Phased Array

Operating Console

- Fully digital modular platform
- Factory presets (unlimited programmable) for every probe and application

Beam Former

- Ultrasound beam generation with:
  - Programmable number of cycles
  - Frequencies: up to 18 MHz
- Up to 8 focal zones dynamically controlled
- Up to 15 steering angle dynamically switchable (on frame basis for Linear/Convex Probe)
- CW generation capability
- Programmable ultrasound beam aperture
- TEI

Image Former

2D
- Field of view:
  - $19° \div 180°$ on Convex Array
  - $14° \div 89°$ on Phased Array
  - $16 \div 47$ mm on Linear Array
  - $3° \div 60°$ on Linear Array with TP-View
- Probe depending formats:
  - Phased Array
  - Linear Array (with steering and TPView)
  - Convex Array
- Depth: $22 \div 360$ mm depending on probe

- Digital scan converter with bilinear interpolation process (860x600x8bits)
- Frame rate: up to1449 Hz
- Maps:
  - up to 10 (customizable) post processing gray maps
  - up to 20 Color Doppler color maps
  - up to 9 Power Doppler color maps
- Zoom:
  - High definition zoom (Real time)
  - Variable magnification from 1.45 up to 8X (Real time / Frozen image)
- XView processing:
  - 3 custom algorithms (4 parameters each)
  - Steering (linear probes): up to ±30° with up to 15 step
- Gain and TGC AutoAdjust
- Biopsy kits and display line
- Capability to change gain on frozen images

M-Mode
- Sweep time: 1.7 ÷ 12 sec
- Lines with CMM: up to 3
- Capability to change gain on frozen images

CFM
- Frequencies: 1.7 ÷ 12,5 MHz
- Sampling PRF: 125 Hz ÷ 11.6 KHz
- Wall filters: 5 levels
- Data dynamic: 11 bit (+5 for intensity)
- Maps: up to 18
- Frame rate: up to180 Hz
- Frame interpolation
- Interleave: up to 32 lines
- Samples: up to 512 lines
- Packet size: 4 ÷ 16
- Format: ROI w/wo wider b/w

- Steering (linear probes): up to ±30° with up to 15 step
- HD CFM (up to 4 values of color spatial resolution)
- AutoAdjust
- Velocity range CFM 5.35m/s (SP2730, 1.7MHz)

DOPPLER PW
- Frequencies 1.7 ÷ 12.5 MHz
- PRF: 500 Hz ÷ 41.7 KHz
- Multigate HPRF
- Wall filters: 50 ÷ 1200 Hz (10 step)
- Stereophonic audio
- Sweep Time: 1.7 ÷ 12 sec
- Spectrum: FFT with 64, 128 or 256 frequencies, interpolated up to 512 points (analysis time: ≤1 ms)
- Sample Size: 0,5 ÷ 24 mm
- Angle correction : 90°
- Steering (linear probes): up to ±30° with up to 15 step
- Doppler gain, baseline and scale AutoAdjust
- Capability to change Baseline and gain on frozen images
- Velocity range PW 19.20 m/s (SP2730, 1.7MHz)
- Smart Doppler with Linear Probes

DOPPLER CW
- Frequencies: 2.0 ÷ 8 MHz
- Wall filters: 40 ÷ 1800 Hz (8 step)
- Stereophonic audio
- Sweep Time 1.7 ÷ 12 sec
- Spectrum: FFT with 64, 128 or 256 frequencies
- Velocity range: up to +/- 6.42 m/s (@ 2.1 MHz)
- Capability to change Baseline and gain on frozen images
- Doppler gain, baseline and scale AutoAdjust

Archiving Capabilities

- Still image (Full resolution)
- Video clips (Full resolution)
- Patient data, Annotations, Bodymarks and Measurement from the graphic overlay
- Reports
- Offline capability
- Pause a study
- Visual comparison (saved images and clips can be compared both with each other and with archived images and clips).
- Visual comparison with real time images and clips
- Compressed images and clips
- Cine Memory: up to 1.000 frames
- PC: ≥ 2 GByte
- Local drivers
  - Hard disk: ≥ 250 GB
- Internal Patient Database
- User selectable filter for the database search
- Still images and loops storage in DICOM formats
- Real Time Archive capability for still frames and video clips
- Stored data thumbnails always displayed on two columns on the right side of the screen
- IHE Compliant
- Annotation/Bodymark/Measurements capability on previously stored images

Connectivity

- I/Os connectors
  - LAN RJ45
  - 4 USB
- Dedicated connectors
  - Audio input/output (stereo): dedicated port for headset with microphone
  - ECG input
- Wi-Fi (optional)

Data export

- Image formats:
  - Standard output file formats (BMP, PNG, JPEG)
  - Native and DICOM formats
- Clips formats:
  - AVI Codec: Microsoft® MPEG4-V2 and Microsoft® -Video1
  - Still frames: compressed (lossy, not lossy) and not compressed
  - Native and DICOM formats
- Patient data, Annotations, Bodymarks and Measurements from the graphic overlays
- Reports in PDF

Video I/O

- HDMI output (auxiliary monitor)

Printing Capability

- Ink jet color or Laser B/W & Color USB Printer (1,2,4 and 6 images printed out on A4 format
- Thermal Digital B/W and Color Printers

IHE Compliance

Integrating the Healthcare Enterprise (IHE) is an initiative by the healthcare industry and professionals to improve the way computer systems in healthcare share information.

IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical needs in support of optimal patient care. System developed in accordance with IHE communicate with one another better, are easier to

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implement and enable care providers to use information more effectively.

MyLabDelta complies with the following IHE profiles:

- Scheduled Workflow,

- Echocardiography Workflow integrates ordering, scheduling, imaging acquisition, storage and viewing for digital echocardiography

- Cardiology Evidence Documents adds cardiology specific options to the Radiology ED profiles (specifies how data objects such as digital measurements are created, exchanged, and used)

- Portable Data for Imaging

- Patient Information Reconciliation

For more details, please refer to the updated version of the IHE Integration Statement present on the Esaote website (www.esaote.com).

Software

- Operating system: Windows® XP Embedded
- Multilanguage Operation Menus (English, French, German, Italian, Spanish, Portuguese, Russian)
- Reports, calculations and measurements (application dependent)
- Start-up: less than 20s (with batteries)
- Shut-down: around 30s

Security

- Two different accounts: administrator and users
- Multiple users
- Login by user

DICOM Connectivity

MyLabDelta system supports the following DICOM service classes:

- Verification service class as the SCU and SCP
- Modality Worklist management service class in the role of SCU
- Modality Performed Procedure Step (MPPS) class in the role of SCU
- Storage service class as a SCU
- Storage Commitment service class as SCU
- DICOM Print SCU
- DICOM Query Retrieve

Verification Service Class
As the SCU for the Verification SOP class, the system allows the user to test the availability of remote DICOM nodes from the DICOM configuration pages

As the SCP for the Verification SOP class, the system answers to verification requests coming in from remote DICOM nodes (when Storage Commitment is active)

Modality Worklist Management Service Class
As the SCU for the Modality Worklist management SOP class, the system allows for querying the Information System obtaining information about scheduled exams and patient demographics

Modality Performed Procedure Step (MPPS)
As the SCU for the Modality Performed Procedure Step SOP class, the system automatically updates systems involved in the echocardiography workflow (CIS, PACS) about the status of the study

Storage Service Class
As the SCU for the Storage service class, the system supports transferring objects of the following SOP classes to remote DICOM nodes (PACs):

- DICOM Ultrasound Image storage SOP class for transfer of 2D single frame images either uncompressed or using lossless or lossy image compression

- DICOM Ultrasound Multi-Frame Image Storage SOP class for the transfer of 2D clips using lossy image compression
- DICOM Secondary Capture Image Storage SOP class for the for measurement information in a human readable format
- DICOM Comprehensive Structured Report Storage SOP class using the Adult Echocardiography Procedure Report template (TID 5200) or the Vascular Ultrasound Procedure Report template (TID 5100) for the transfer of measurement information about Cardiac and Vascular exams
- The system allows for the following storage modes:
  - o "End of exam", the system automatically stores all image and measurement data in the background once the study has been closed
  - o "Manual", the system transfer multiple exams as selected by the user in the background

Storage Commitment Service Class
As the SCU of the Storage Commitment service class, the system automatically requests the archive to take responsibility for the safekeeping of data that were stored using the above mentioned storage classes

For more details on all the provided DICOM services, please refer to the updated version of the DICOM Conformance Statement present in the Esaote website.

Dimensions

- Approximately 34.5(w) x 8.0-13.5(h) x 40.0-45.0(d) cm (on site)

Weight

- Approximately 8.1 kg without batteries and AC/DC power supply
- Approximately 9.0 kg with batteries
- Approximately 10.0 kg with AC/DC power supply

Operating requirements

- Temperature: 15÷35°C
- Humidity:
  - 15÷90 % (not condensing) without standby batteries
  - 15÷80 % (not condensing) with standby batteries
- Pressure: 795÷1060 hPa

Storage requirements

- Temperature: -20 ÷ +60°C
- Humidity: 5÷90 % (not condensing) without batteries, in the range -20 ÷ +60°C; 5÷27% at 60°C
- Humidity: 5÷80 % (not condensing) with batteries, in the range -20 ÷ +60°C; 5÷27% at 60°C
- Pressure: 795÷1060 hPa

Standard Compliance

MyLabDelta meets the requirements of the Medical Device Directive, obtains the CE mark and complies to the following standards.

- · EN 60601-1
- · EN 60601-1-2

- EN 60601-1-6
- EN 60601-2-37
- EN ISO 10993-1
- EN 61157
- EN 62366
- EN 62304
- EN ISO 14971
- ISO 15223-1
- AIUM/NEMA UD2
- AIUM/NEMA UD3

Noise value

Position	Level [dBA]
Operator seated	52.2
Patient	50.2

Operator seated: measurement point centered on the front surface of the ultrasound at a horizontal distance of 0.30m from the trackball and a height, with respect to the support plane of the ultrasound system, equal to 0.94m.

Operator standing: measurement point centered on the front surface of the ultrasound at a horizontal distance of 0.30m and a height of 1.37m, with respect to the support plane of the ultrasound system.

Patient: point of measurement is centered on the front surface of the scanner at a horizontal distance of 0.60 m from it and at a height of 0.94 m from the floor

Power Cables

- Power cable with CEE socket
  - Socket: 510 IEC 320/C13 type: 10A-250V
  - Plug: VII (7) VII type; 10A-250V
  - Conductors: 3
  - Section: 1 mm2
  - Length: 2,5 m

- Power cable with CEI socket
  - Socket: 510 IEC 320/C13 type: 10A-250V
  - Plug: I/3 CEI 23-16 type; 10A-250V
  - Conductors: 3
  - Section: 1 mm2
  - Length: 2,5 m
- Power cable with NEMA socket
  - Socket type and amperage: 510 IEC 320/C13 type; 13A-125V
  - Plug type: NEMA 5-15; 13A-125V
  - Conductors: 3
  - Section: AWG 16
  - Length: 3 m

Calculation & Reports

- Standard Calculation Packages for:
  - Abdomen
  - Cardiology
  - Reproduction

- Standard biometry reports & user programmable reports
- All the reports are automatically stored in the patient file
- Automatic Doppler Measurements (ADM) and profiles (Real Time profiles extraction with Aliasing managing capability; Measurement on automatically detected hearth cycle or on selectable time slot for venous flow; Averaged values on selectable number of measurement; Selection of Full, Negative or Positive range; Add to report capability, Automatic point to point Doppler measurement)
- Refer to Operation Manual

Generic Measurements

The tables below list the measurements available in each/application mode.

B-Mode

Parameter	Measurement	Displayed results
Distance	Distance	Distance
Distance ratio	Distance1, Distance2	Distance1, Distance2, Distance1/Distance2
% Distance reduction	Distance1, Distance2	Distance 1, Distance 2, (Distance1 - Distance2)/Distance1
Length (Vertex)	More distances	Global distance
Length (Trace)	Profile	Global distance
Area (Ellipse axes)	Area, Distance	Area, Perimeter
Area (Vertex)	More distances	Area, Perimeter
Area (Trace)	Profile	Area, Perimeter
Area ratio	Area1, Area2	Area1, Area2, Area1/Area2

Parameter	Measurement	Displayed results
% Area reduction	Area1, Area2	Area1, Area 2, (Area 1 - Area 2)/Area1
Volume (Ellipse)	Distance, Area	Area, Volume
Volume (Trace)	Profile, Distance	Area, Distance, Volume
Biplane volume	Distance1, Distance2, Distance3	Distance1, Distance2, Distance3, Volume
Ellipse ratio	Two areas (ellipse based)	Two areas, Area1/Area2
Hip angle	Distance1, Distance2, Distance3	α and β angles

M-Mode

Parameter	*Measurement*	*Displayed results*
Distance	Distance	Distance
Distance ratio	Distance1, Distance2	Distance1, Distance2, Distance1/Distance2
Time	Time	Time
Time ratio	Time1, Time2	Time1, Time 2, Time 1/Time 2
Heart Rate	Time	R-R interval, Heart rate
Velocity	Velocity	Distance, Time, Velocity
Velocity ratio	Velocity1, Velocity2	Velocity1, Velocity2, Velocity1/Velocity2

Doppler

Parameter	Measurement	Displayed results
Time	Time	Time
Time ratio	Time1, Time2	Time1, Time2, Time1/Time2
Velocity	Velocity	Instantaneous velocity

Parameter	Measurement	Displayed results
Cardiac Velocity	Velocity	Instantaneous velocity, Instantaneous gradient
Velocity ratio	Velocity1, Velocity2	Velocity1, Velocity2, Velocity1/Velocity2
Heart Rate	Time	R-R interval, Heart rate
Systolic velocity /Diastolic velocity	Systolic velocity, Diastolic velocity	Systolic velocity, Diastolic velocity, Systolic velocity/Diastolic velocity
Cardiac FVI	Spectral envelope	FVI, Peak velocity, Reverse velocity, Peak and mean gradient
Vascular FVI	Spectral envelope	FVI, Pulsatility index, Resistive index, Reverse velocity, Diastolic velocity, Peak and mean velocity, Peak and mean gradient, Acceleration, Acceleration time, Systolic velocity/Diastolic velocity
Pulsatility index	Spectral envelope	FVI, Pulsatility index, Resistive index, Reverse velocity, Peak and mean velocity, Diastolic velocity
Resistive index	Systolic velocity, Diastolic velocity	Peak systolic velocity, Diastolic velocity, Resistive index

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Parameter	Measurement	Displayed results
Flow (Trace)	Envelope, Contour	Time average velocity, Area, Volume,
Flow (Ellipse)	Envelope, Ellipse	Time average velocity, Area, Volume,
Flow (Diameter)	Envelope, Distance	Time average velocity, Diameter, Area, Volume
Slope	Velocity	Acceleration, PHT

Advanced Measurements

Refer to the Advanced Operations Manual for further information

Custom Measurements

Refer to the Advanced Operations Manual for further information

System Options

TEI

TEI (Tissue Enhancement Imaging) increases the signal-to-noise ratio and further enhances contrast resolution allowing the visualization of a high level of detail, even in difficult-to-scan patients.

The superb contrast and detailed resolution of TEI technology is based on the information always present in returning echoes.

- Touch Screen access and quick response time
- Available in combination with CFM, M-Mode, Power/VeloPower Doppler, TVM and CnTI

TVM

TVM (Tissue Velocity Mapping) provides a complete Wall Motion Analysis for both systolic and diastolic myocardial function evaluation.

- TVM displays color coded information on moving tissue in velocity mode. The Velocity mode displays velocity distribution of moving myocardial tissue
- TVM can operate in
  - o 2D imaging - TVM
  - o M – Mode – MTVM
  - o PW/Doppler – TV
- Factory and user programmable presets for TVM • Requires the cardio module • Available on the SP2730 and Transesophageal transducer ST2612

CMM

CMM (Compass M-Mode) allows to improve the M-Mode visibility during cardiac exams and acquire all information even in hard-to-scan situations with particular or difficult heart positioning.
Up to three independent lines

VPan

VPan (Panoramic Imaging) merges multiple B-Mode images in one complete panoramic image extending the field of view to entire organs.

- Auto fit of composite image
- Image Zoom
- Merging Level – realigning
- Frame marker
- Colorize
- Distance measurement
- Images can be saved to the patient's file
- CFM capability
- Rotation/Pan/Zoom

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TPView

TPView enlarge the field of view without losing resolution and extending structures in abdominal, reproduction and musculoskeletal applications.

- 60°
- Available with all linear transducers

Stress-Echo

Stress-Echo provides a dedicated report template for a complete wall motion score and ejection fraction reporting, which allow the evaluation of any cardiac segment.

- Real Time 2D loops digitally synchronized with the ECG trace
- User-programmable protocols
- Multi-format reviewing capabilities for accurate monitoring of cardiovascular pathologies.
- Loop comparison
- Continuous capture

MView

MView consists in an ultrasound technique which applies beam-line steering and acquire several coplanar scans of an object from different view angles.

- Improved images quality by reducing the presence of artefacts, shadowing and speckle
- Available with all linear and convex/micro convex transducers.
- Up to 15 lines

XView

XView elaborates the pattern of every single frame at the pixel level, eliminating speckle and noise artifacts, dynamically enhancing tissue margins, improving tissue conspicuity and increasing diagnostic confidence through real-time adaptive algorithm.

- Adaptive - During acquisition, XView uses different techniques in order to produce as little speckle as possible.
- Optimized - XView removes speckle, while the information necessary for the diagnostic image is preserved and enhanced

MyLabDesk[3]

- Dedicated software (not for diagnostic use) for review, post-process and printing of exams performed with a MyLab ultrasound system on a PC Workstation working with Windows XP, Vista and Seven Operative Systems.
- User interface extremely similar to the MyLabDelta user interface for convenience
- To import native Esaote file format
- To perform generic measurements
- For reviewing, modifying and printing the examinations (images)
- To export the data by using the standard features of the PC (burn on a CD/DVD, archiving on the local HDD or store on an USB key in standard PC formats, transfer to e-mail, etc.).

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TRANSDUCERS

Probes Technical Specifications

Convex Array Probes

AC2541

- Operating Bandwidth: 1 – 8MHz
- Max Depth: 350mm
- Field of view: 19° - 63°
- B-M Modes Frequencies: RES – H; GEN – M; GEN – L; PEN - H
- TEI Frequencies: RES – H; GEN – M; GEN – L; PEN – H
- CFM–PW Frequencies: 1.6 – 2.2. – 2.8 – 3.3 MHz
- Weight: 95 g
- Dimensions: 101.4 x 66.7 x 34.8 mm
- Biopsy angles: 15°/25°/35°

SC3421

- Operating Bandwidth: 1 – 8MHz
- R 40
- Max Depth: 47 - 357mm
- Field of view: 20° - 86°
- B-M Modes Frequencies: RES – H; GEN – M; GEN – L; PEN - H
- TEI Frequencies: RES – H; GEN – M; GEN – L; PEN – H
- CFM–PW Frequencies: 1.8 -2.0 – 2.5 – 3.3 MHz

SC3123

- Technology: Wideband Electronic Micro-convex array
- Bandwidth: 4 - 9 MHz
- Ray of curvature: 14mm
- Max Depth: 186 mm
- Field of view: 42° - 91°
- B-Mode Frequencies: PEN-M, PEN-L, RIS-L, RIS-M
- TEI Frequencies: PEN-M, PEN-H, PEN-L, GEN-M, RIS-H
- CFM Frequencies: 4.2 – 4.5 – 5.0 – 6.3 MHz
- PW Frequencies: 4.2 – 4.5 – 5.0 – 6.3 MHz
- Weight: 70 g

Dimensions: 87 x 27 x 30 mm

Linear Array Probes

SL2325

- Bandwidth: 6 – 18 MHz
- Max Depth: 103 mm
- Field of view: 18 – 38 mm
- B-Mode Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- TEI Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- CFM Frequencies: 6.3 – 8.3 – 10.0 – 12.5 MHz
- PW Frequencies: 6.3 – 8.3 – 10.0 – 12.5 MHz
- Steering angles: 7 steps
- Weight: 100 g
- Dimensions: 105 x 56.4 x 25.8 mm
- Biopsy angles: 45°/50°/60°/70

SL3235

- Bandwidth: 6 – 18 MHz
- Max Depth: 103 mm
- Field of view: 28 mm
- B-Mode Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- TEI Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- CFM Frequencies: 6.3 – 8.3 – 10.0 – 12.5 MHz
- PW Frequencies: 6.3 – 8.3 – 10.0 – 12.5 MHz
- Steering angles: 7 steps
- Weight: 100 g
- Footprint: 28 x 6.5 mm

SL3323

- Bandwidth: 3 – 13 MHz
- Depth: 22- 103 mm
- Field of view: 33 mm
- B-Mode Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- TEI Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- CFM Frequencies: 4.2 - 5.6 - 6.3 - 7.1 MHz
- PW Frequencies: 4.2 - 5.6 - 6.3 - 7.1 MHz
- Steering angles: 7 steps
- Weight: 100 g

SL1543

- Operating Bandwidth: 3 – 13MHz
- Max Depth: 103mm
- Field of view: 17 – 47 mm
- B-M Modes Frequencies: RES – H, GEN – M, GEN – L, PEN - H
- TEI Frequencies: RES – H, GEN – M, GEN – L, PEN - H
- CFM–PW Frequencies: 4.2 – 5.0 – 6.3 – 7.1 MHz

- Steering angles: 8 angles
- Weight: 100 g
- Dimensions: 88.4 x 58.1 x 27 mm
- Biopsy angles: 40°/60°

AL2442

- Operating Bandwidth: 3 – 11MHz
- Max Depth: 177mm
- Field of view: 10 – 40 mm
- B-M Modes Frequencies: RES – H, GEN – M, PEN – L, PEN - H
- TEI Frequencies: RES – H, GEN – M, PEN – L, PEN - H
- CFM–PW Frequencies: 2.5 – 3.3. – 4.2 – 5.0 MHz
- Steered angles: 8 angles
- Weight: 120 g
- Dimensions: 93.2 x 53.4 x 27.6 mm
- Biopsy angles: 25°/35°/50°

SL3332

- Operating Bandwidth: 3 – 11MHz
- Depth: 22-- 177mm
- Field of view: 33 mm
- B-M Modes Frequencies: RES – H, GEN – M, PEN – L, PEN - H
- TEI Frequencies: RES – H, GEN – M, PEN – L, PEN - H
- CFM–PW Frequencies: 2.5 – 3.3. – 4.2 – 5.0 MHz
- Steered angles: 7 angles

SV3513

- Veterinary endorectal transducer
- Operating Bandwidth: 5-10 MHz
- Max Depth: 177 mm
- Field of view: 20 - 50 mm
- B-Mode Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- TEI Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- CFM Frequencies: 4.5 – 5.0 – 6.3
- PW Frequencies: 4.2 – 4.5 – 5.0 – 6.3
- Steering angles: 8 steps

Phase Array Probes:

SP2730

- Operating Bandwidth: 1 – 4MHz
- Max Depth: 355mm
- Field of view: 16° - 87°
- B-M Modes Frequencies: RES – H, RES – L, GEN – M, PEN - H
- TEI Frequencies: RES – H, RES – L, PEN – L, PEN - M
- CFM–PW Frequencies: 2.0 – 2.5 MHz
- CW Frequencies: 2.0 - 2.5 MHz
- Weight: 40 g
- Dimensions: 80.5 x 34.2 x 27.7 mm

P 3-11

- Operating Bandwidth: 3–11MHz
- Depth: 44-296mm
- Field of view: 18° - 89°

B-M Modes Frequencies: PEN-H, PEN-L, GEN-M, RES-L, RES-H
TEI Frequencies: PEN-H, PEN-L, GEN-M, RES-L, RES-H

- CFM–PW Frequencies: 2.8 – 3.6 - 4.2 MHz
- CW Frequencies: 3.6 - 5.0MHz
- Footprint: 17x13 mm
- Weight: 96 gr probe head excluding

ST2612

- Application: Trans esophageal
- Bandwidth: 3 – 7 MHz
- Max Depth: 177 mm
- Field of view: 18° - 89°
- B-Mode Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- TEI Frequencies: PEN–H, GEN-L, GEN-M, RES-H
- CFM Frequencies: 3.3 – 3.6 – 3.8 MHz
- PW Frequencies: 3.3 – 3.6 – 3.8 MHz
- CW Frequencies: 3.6 – 5.0 MHz
- Weight: 500 g
- Dimensions: 45 x 14 x 1100 (Endoscope) mm
- Weight: 1.5 Kg (Handle: 0.5 Kg; Handle + Cable + Endoscope: 0.8 Kg; Complete probe: 0.9 Kg)
- Dimensions: 45 x 14 x 1100 (Endoscope) mm Dimensions: 1.0 x 0.8 x 80 cm (Tip: 3.5 x 1.0 x 0.8 cm; Endoscope: 80 x 0.7 cm; Handle: 30.0 x 4.6 x 3.3 cm; Cable: 200 – 220 x 0.9 cm; Connector: 16.5 x 5.0 x 12.0 cm; Wheels: 6.0 x 2.2 cm)