Vscan* with Dual Probe

Data Sheet

Product not available in all geographies.

Vscan™ with Dual Probe is general purpose diagnostic ultrasound imaging system for use by qualified and trained health care professionals enabling visualization and measurement of anatomical structures and fluid. The dual headed probe integrates both linear and phased array transducers that allows for a wide range of clinical applications.

Its pocket-sized portability and simplified user interface enables integration into examination and training sessions. The information can be used for basic/focused assessments and adjunctively with other medical data for clinical diagnosis purposes during routine, periodic monitoring, and triage assessments for adults and pediatrics. Vscan with Dual Probe can be useful for procedural guidance.

Vscan family of products is complemented with gateway software enabling image management at customers' PC, a Vscan web portal, including online access to product and clinical information.

General specifications

Dimensions and Weight	
Display unit	135 x 73 x 28 mm
Probe	129 x 39 x 28 mm
Weight (unit and probe)	436 g
Display	3.5 inches, 240 x 320 pixels resolution

Imaging
Black and white mode for displaying anatomy in real time
Color-coded overlay for real-time blood flow imaging
Total scan time of 60 minutes with fully charged battery (with 80% black and white, 20% color imaging)

Dual Probe characteristics
The Dual Probe contains two transducers in a single probe.

Phased array transducer for deep scanning
Field-of-view for black and white imaging: up to 75 degrees with maximum depth of 24 cm
The color flow sector represents blood flow within an angle of up to 40 degrees
Broad-bandwidth phased array: from 1.7 to 3.8 MHz

Linear array transducer for shallow scanning
Field-of-view for black and white imaging: aperture width of 2.9 cm with maximum depth of 8 cm
The color flow sector represents blood flow over image with full aperture and entire depth
Broad-bandwidth linear array: from 3.4 to 8.0 MHz

User interface

The navigation wheel with minimized number of keys provides an intuitive thumb-controllable user interface
AutoOptimize adjusts gain for all depths automatically
AutoCycle (cardiac preset) automatically detects full heart cycle for easy and fast review or storage
Duration of clip stored (non-cardiac presets) is configurable with 1, 3 or 6 seconds
Presets help simplify optimized settings for imaging different organs
Voice recordings can be stored as part of each examination – loudspeaker allows replay from device

Clinical applications

Cardiac
Abdominal
Renal
Obstetrics and gynecology
Urology
Fetal
Evaluation of presence of fluid
Peripheral vascular
Procedure guidance for arterial and venous vessels
Imaging guidance for needle/catheter placement
Thoracic/lung
Thyroid and other small organs
Long bone
Hip and knee joints
Pediatric

Measurements

Distance measurement on-board of device

Distance and area measurements at PC with Vscan gateway software installed

Data storage

Data are stored on microSD or microSDHC card upgradeable to 32 GB

Data are stored in generic formats: jpg for still frames, mpg for loops, wav for voice recordings

Data are stored in examination folders

All data can be recalled via gallery function

Docking and charger station

The display and control unit can be easily slid into docking station utilizing the two connections provided	• Universal power supply with 100-240 V, ~50/60 Hz. Global plugs enabling recharge of docked device • USB connection to PC

Recharge time for device battery: 75 minutes for 90% battery capacity

Separate holder for convenient placement of probe

Vscan gateway software

PC software comes with the device to offer an enhanced experience, which provides a gateway between Vscan with Dual Probe, customers' PC tools and GE's service hotline.

Stored data can be viewed and interpreted on PC

Basic distance and area measurements

Images with those measurements can be stored back onto the device into the original exam folder

Offline adjustment of contrast and brightness settings

Patient data, including name, ID, birth date, or comments, can be added to exam information

Image annotation

Video controls for clips such as play and pause, or back and forward stepping

Playback of recorded audio files

Data export into Microsoft Outlook™ e-mail, to hard disk, any compatible media or shared folders in network for long-term storage or easy access to other applications

Exports can be executed for selected images or selected exams

Export to pdf file with patient demographics, exam comments and selected images, which can be used as simple electronic report and/or further printout

Folders can be mounted for deploying gateway tools on stored data

Fast data finding with filter or sort function for exam date, patient name or ID

Vscan and gateway software diagnostic tools

Software updates for the gateway software and the Vscan with Dual Probe may immediately be available if the PC with installed gateway software is connected to internet

With internet connection, GE's service hotline is available online – remote diagnostics and even update installations can be enabled

PC operating system requirements for installing Vscan gateway software

Windows™ 7 and Windows 8

32-bit and 64-bit versions are supported

Windows 7 or Windows 8 running in VMware™ Virtualization Software on Mac OS X 10.6

Minimum hardware configuration	
CPU	Pentium 4 (2.4 GHz) or Pentium M (1.6 GHz)
RAM	1 GB
Disk space	700 MB on system partition; 200 MB on partition where program is installed
Graphic resolution	1024 x 768
Graphics board	DirectX 9.0c compatible
Audio output for loudspeakers or earphones	
At least one USB port available	
Pointing device mouse with left and right buttons	
Alphanumeric keyboard	

Installed software
Windows Media Player™ version 10 or higher
Adobe Acrobat Reader™ 4.0 or higher (for on-line help function)
Internet Explorer™ version 7 or higher
Microsoft Outlook (for sending e-mail from Vscan gateway software)

Vscan web portal

Vscan family customers can register for full content access of the Vscan portal

Online services to enhance the Vscan experience by providing resources from product information to clinical and service support

Specific application references and product education, including an interactive basic ultrasound anatomy section, probe placement tips and reminders, and example images

Additional education resources will be posted on the Vscan web portal, including webinars, further online programs and training opportunities

Standard configuration

The following options are included in the standard Vscan with Dual Probe configuration:

Docking station including:	• Global AC adapter with interchangeable plugs (USA and China, EU, UK, Australia) • USB cable
Vscan gateway software	
One rechargeable battery	
4 GB microSD memory card	
Soft case	
Access to Vscan web portal with entitlement to full online education reference materials	
Gel (60 g bottle)[1]	

Selectable options

Carrying case
Separate battery charger

SAFETY CONFORMANCE

Safety classification:

- Vscan with Dual Probe is a classified as internally powered medical electrical equipment when not connected to the AC adapter or docking station with a type BF applied part medical electrical equipment, according to IEC 60601-1
- CE marked to European Medical Devices Directive (MDD) 93/42/EEC
- Certified to CAN/CSA C22.2 No.601.1-M90

- Vscan with Dual Probe conforms to the applicable clauses of the following safety standards:
  - IEC[2] 60601-1
  - IEC[2] 60601-1-4
  - IEC[2] 60601-2-37
  - NEMA UD2
  - ISO 10993-1
  - IEC[2] 60601-1-2
  - IEC[2] 60601-1-6
  - AAMI ES 60601-1
  - NEMA UD3
  - EMC emissions Group 1 class B requirements per CISPR 11/EN 55011
- The AC adapter is class II medical electrical equipment, according to IEC 60601-1

[1] Not available in China or Brazil.

[2] Including national deviations.

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imagination at work

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