VINNO G55

Ultrasound System Specifications

Extremely portable and exceptional performance VINNO G55 meets all your clinical needs by:

- Unmatched image quality
- All ranges of features, functions, and probes
- Flexible and customized simple workflow

System Overview

Architecture

- The revolutionary RF platform, **The First In The World**, allows for more accurate information. This platform transfers all RF data for computing without any information loss. It has a much better advantage in detail imaging than current advanced platforms
- Thanks to the RF platform, it allows the development of many RF-based processing algorithms, which have ultra-premium contrast and resolution imaging
- This unique platform is capable of processing multiple data streams simultaneously
- Up to 25MHz next generation digital broadband and high resolution acoustic beamforming
- The new 12 bit, low noise, digital circuitry, with up to 280db dynamic range has improved 2D performance and increased Doppler sensitivity
- Directional-enhanced information compiling for more tissue detail and reduction of angle-generated artifacts
- Next generation adaptive image processing for noise and artifact reduction that improves tissue presentation and edge definition
- Fully independent, triplex multiple mode operation for easy in Doppler procedures
- Multi-processors allow simultaneous mode changes and support for advanced system functionality

Applications

- Abdomen
- Obstetric
- Gynecology
- Cardiology
- Urology
- Vascular
- TCD
- Small Parts
- Pediatrics
- Intra-operative

Imaging features

• 2D grayscale imaging
• Harmonic imaging both in tissue harmonic and pulse inversion harmonic technologies
• VFusion, RF-based directional-enhanced information compounding
• VSpeckle, specialized and adaptive imaging processing to remove speckle noise artifacts and enhance tissue edge for clarity and accuracy
• VTissue, the advanced adaptive image processing to compensate for sound and speed variation in different tissue
• Auto imaging optimization*
• Easy Comparative Function to compare previous exam
• Tissue velocity M-mode
• Color M-mode*(optional)*
• Color Doppler imaging
• Power Doppler imaging
• Pulse wave Doppler imaging
• Simultaneous 2D and M mode
• Duplex 2D/PW Doppler
• Triplex 2D/Color/PW Doppler
• High PRF pulsed wave Doppler
• Continuous wave Doppler
• RF-based Zoom
• FULL screen imaging to enlarge imaging size
• Dual real time imaging without compromising imaging size
• Multi Angle M-mode with 360 degree rotation *(Optional)*
• PView for panoramic imaging *(Optional)*
• TView for trapezoidal imaging
• Elastography imaging*(Optional)*
• Contrast imaging*(Optional)*
• Free 3D
• 3D/4D imaging
• 3D/4D HQR (High Quality rendering) (Optional)*
• Spatio_Temporal Image Correlation (STIC) (Optional)*
• Tomographic display (MCUT)
• Inversion mode*(Optional)*
• Magic Cut
• Smart Touch 3D/4D operation*(Optional)*
• Free View*(Optional)*
• Auto NT* *(Optional)*
• Auto IMT function*
• Real-time grayscale 4D
• Three leads ECG function *(Optional)*
• Tissue Doppler (TD) mode*
• Tissue Velocity Imaging (TVI) mode* *(Optional)*
• Tissue Velocity M (TVM) mode**(Optional)*
• Contrast Imaging(CBI) **(Optional)*

Standard features

• Up to 25Mhz high frequency in system platform. Up to 18MHz's probes are supported
• RF platform and RF data processing
• Up to 1500 seconds standard cine storage
• 1T HDD
• Integrated DVDRW
• Integrated black/white thermal video printer slot
• Patient information database
• Image archive on hard drive
• Quick store to USB memory stick
• Quick store to hard drive
• Quick print to B/W and color thermal video printer

- Network storage and printing
- Full measurement and analysis package
- Real time auto wave Doppler track and calculations
- Vascular calculations
- Cardiac calculations
- OB calculations and tables
- Gynecological calculations
- Urological calculations
- Renal calculations
- Volume calculations
- Barcode reader for patient information input
- Wireless networking for easy data sharing, storage and printing *(optional)*
- Bluetooth for image data transfer*(optional)*
- Image data transfer directly by E-Mail with network access*(optional)*
- Up-to-date connectivity and data management solutions, wireless *(optional),* LAN, Bluetooth, E-Mail, integrated database
- DICOM compatibility*
- Three active probe ports, plus one dummy probe port
- 5 USB ports
- 8 TGC slides
- Average 4 multiple adjustable frequency in every probe and mode
- Up to 512 line density
- 1 DVI-D interface
- 1 Audio in interface; 1 Audio out interface
- 1 Speaker interface
- 1 RJ45 interface

Ergonomics

- Unique human oriented design for comfort and convenience
- Fully articulating 18.5-inch high resolution flat panel display
- Lifted operation panel 150mm
- Easy access DVD media drive
- 3+1 easy access transducer ports (three active and one dummy)
- 4 transducer holders (removable for easy cleaning)
- Integrated touchable alphabetic keyboard
- Simple, easy and effective cable management structure

Keyboard

- Highly sensitive 10 inch capacity touch panel
- Intuitive, configurable and touchable interactive operation interface
- Ergonomic hard keys for general ultrasound operations
- 8 TGC slides, functionality at any depth
- Backlight keys

Image display screen

- 18.5 inch high resolution LCD technology
- Brightness, contrast and color temperature adjustment
- Adjustable Gamma curve optimization for dedicated applications
- Big angel swivel and tilting capability

Peripherals

- B&W thermal video printer: Sony UP-D897MD (optional)
- Color thermal video printer: Sony UP-D25MD (optional)
- Memory stick (optional)

Dimensions and Weight

- Height: 1260mm
- Width: 605mm

• Depth: 875mm
• Net Weight: 60kg

Electrical Power

• Voltage: 100-240V AC
• Frequency: 50/60Hz
• Power: < 470VA for console only

Transducers

Transducer Technology

• Xcen technology for wideband frequency
• Pure wave technology for high resolution imaging
• Unique and high technical Xcen probe connector to adapt all different type of VINNO product models

Transducer types

• Convex array
• Linear array
• Phase array
• 4D probe
• Endocavity probe
• Micro-convex array

Transducer selection

• Electronic switching of transducers
• User customizable imaging presets for each transducer and application
• Automatic dynamic receiving focus in all transducers
• Multiple adjustable transmit focal zone, up to 8 focal zone

G2-5C Broadband Curved Array

• Field of view: 66 degree
• Convex radius: 50mm
• Application: abdomen, OB/Gyn, urology, pediatric
• Frequency range: 1.4 -5.6MHz
• Pulsed wave Doppler, color Doppler, power Doppler, harmonic
•Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes
•Reusable biopsy guide available

F2-5C Broadband Curved Array

• Field of view: 59 degree
• Convex radius: 59.5mm
• Application: abdomen, OB/Gyn, urology, pediatric
• Frequency range: 1.6 -5.5MHz
• Pulsed wave Doppler, color Doppler, power Doppler, harmonic
• Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes
•Reusable biopsy guide available

D3-6C broadband curved array volume probe

• Field of view: 78 degree
• Convex radius: 40mm
• Application: abdomen, OB/Gyn, urology
• Frequency range: 1.9 - 7MHz
• Pulsed wave Doppler, color Doppler, power Doppler, harmonic, 3D/4D grayscale
• Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

D3-6CX broadband curved array volume probe

- Footprint: 48mm
- Field of view: 75 degree
- Convex radius: 40mm
- Application: abdomen, OB/Gyn, urology
- Frequency range: 2.1 – 5.7MHz
- Pulsed wave Doppler, color Doppler, power Doppler, harmonic , 3D/4D grayscale, 3D color
- Multi-imaging frequency setting in 2D, 3D/4D, Harmonic, color Doppler and Wave Doppler modes

G4-9M broadband micro convex array

- Field of view: 138 degree
- Convex radius: 12mm
- Application: pediatric, abdomen, cardiac
- Frequency range: 3 - 10MHz
- Pulsed wave Doppler, color Doppler, power Doppler, harmonic
- Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

G4-9E broadband micro convex endocavity array

- Field of view: 180 degree
- Convex radius: 9.6mm
- Application: Ob/Gyn, urology
- Frequency range: 3 - 10MHz
- Pulsed wave Doppler, color Doppler, power Doppler, harmonic
- Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler
- Reusable biopsy guide available

D4-9E broadband micro convex 4D endocavity array

- Field of view: 125 degree
- Convex radius: 10mm
- Application: Ob/Gyn, urology
- Frequency range: 3 - 10MHz
- Number of element: 128
- Pulsed wave Doppler, color Doppler, power Doppler, harmonic , 3D/4D grayscale,
- Multi-imaging frequency setting in 2D, 3D/4D, Harmonic, color Doppler and Wave Doppler modes

X4-12L broadband linear array

- Fine pitch, high resolution
- Applications: vascular, small parts
- Frequency range: 4.5 -13MHz
- Pulsed wave Doppler, color Doppler, power Doppler, harmonic
- Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

X6-16L broadband linear array

- Fine pitch, high resolution
- Applications: vascular, small parts
- Frequency range: 6.5 -18MHz
- Pulsed wave Doppler, color Doppler, power Doppler, harmonic
- Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

U5-15LE broadband linear array

- Fine pitch, high resolution
- Applications: small parts, specially for breast, vascular
- Footprint: 52mm

• Frequency range: 5 -15Mhz
• Pulsed wave Doppler, color Doppler, power Doppler, harmonic
• Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

I4-11T broadband linear array

• Fine pitch, high resolution
• Frequency range: 4.2-11Mhz
• Pulsed wave Doppler, color Doppler, power Doppler, harmonic
• Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

G1-4P phased array

• Applications: cardiac, abdomen, Ob/Gyn, Urology
• Frequency range: 1.35-4.3Mhz
• Pulsed wave Doppler, continuous wave Doppler, color Doppler, power Doppler, harmonic
• Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

S1-6P phased array

• Single Crystal technology
• Applications: cardiac, abdomen, Ob/Gyn, Urology
• Frequency range: 1.9-7Mhz
• Pulsed wave Doppler, continuous wave Doppler, color Doppler, power Doppler, harmonic
• Multi-imaging frequency setting in 2D, Harmonic, color Doppler and Wave Doppler modes

Advanced Imaging controls

VFusion

• Available on all transducers and for 2D, 3D/4D (except phase array)
• Up to 5 levels of directional imaging fusion to enrich information
• Operate in conjunction with VSpeckle, harmonic imaging

VSpeckle

• Available on all transducers and for 2D, 3D/4D
• Virtually eliminate speckle noise artifact and dynamically enhances tissue margins
• Selectable multiple levels of speckle noise reduction and smoothing
• Operates in conjunction with VFusion and harmonic imaging

VTissue *

• Advanced imaging processing to adapt to the speed of the ultrasound variation in different tissue
• Improved detail resolution and conspicuity of lesions
• Presentable sound and speed in different applications
• One touch operation to ease diagnosis

3D/4D HQR (High Quality Rendering) ***(Optional)***

- Amazing high image quality
- Extreme realistic rendering images
- Similar operation as normal rendering

Spatio-Temporal Image Correlation (STIC) ***(Optional)***

- Visualize the fetal heart or an artery
- One complete heart cycle represented
- Using 3D static acquisition

Inversion mode*(Optional)*

- This render mode is used to display anechoic structures such as vessels
- It invert the gray values of the rendered image, such as black image information become white and vice versa

Magic Cut

- Ability to edit images, make possible to cut away structure obstructing the view in the ROI
- Several cutting methods available

Smart Touch 3D/4D Operation*(Optional)*

- Fully utilize touch panel possibility for easy operation, such as rotation 3D rendering image, move ROI, create line by finger

Free View*(Optional)*

- Provide any plane view to visualize the internal tissue information
- Improve the contrast resolution to facilitate the detection of diffuse lesions in organs

Auto NT (Nuchal Translucency) measurement (Optional)

- Automatically detect Nuchal Translucency in interest box
- Automatically report thickness result of NT

Auto IMT (Intima-Media Thickness) measurement

- Automatically detect intima media thickness in interest box
- Automatically report the result of IMT
- Available in linear probe

Next generation RF-based image processing

- Available on all imaging transducers in 2D grayscale modes
- Virtually eliminates speckle noise artifact and dynamically enhance tissue edge
- Operates with other real-time processing algorithms

Smart 3D Volume Measurement(Optional) *

- Trace the margin of the irregular circle in different slices of volume data in irregular shape
- Automatically report the volume of the irregular object

Auto Follicle(2D/3D)(Optional) *

- Just click on the area of follicle in B mode, the area of this follicle will be reported automatically
- Report the area of different follicle in the volume data automatically

Tissue Doppler (TD)

• Present wall motion spectrum by using Doppler principle
• Provide wall motion direction and velocity information

Tissue Velocity Imaging (TVI) (Optional)

• Color codes the velocities in tissue
• Present tissue color imaging by using Doppler principle
• This color image is overlaid onto the 2D image
• Captures low flow but high amplitude signals associated with wall motion

Imaging modes

2D Imaging

• Pre-defined ATGC (adaptive temporal gain compensation) curves optimized for consistently excellent imaging
• B/M acoustic output: 0-100%
• Depth: able to adjust from 1 to 36cm
• Select between 1 to 8 transmit focal zones
• Reverse function: on/off
• VFusion function
• VSpeckle function
• Harmonic imaging both tissue harmonic and phase inversion
• Cineloop image review
• Selectable 2D line density
• Dual imaging with independent cineloop
• 256(8 bit) gray level
• Up to 8 focus zone adjustable
• Multiple color maps with chroma imaging
• FULL screen imaging to larger image size
• Multi frequency: probe dependent
• Gray filter: 6 steps
• Persistence: 8steps
• Selectable image angles, probe dependent
• Gain: 0-100%
• Dynamic range: 30-280 db
• VSharpen to enhance edge contrast
• Smooth to improve spatial resolution
• EdgeEnhance to improve detail information and contrast
• VNear to enhance SNR of near field

Harmonic Imaging

• Supports both tissue harmonic and phase inversion imaging (transducer and frequency dependence)
• Second harmonic processing to reduce artifacts and improve image clarity
• Maximize detail resolution and enhance contrast
• Available on all imaging transducers
• Extends high performance imaging capabilities to all patient body types

M mode

• Selectable sweeping rates
• Time marks: 0.025 – 0.5 second
• Selectable display format prospective or retrospective (1/3-2/3, 1/2-1/2, 2/3-1/3, side by side 1/2-1/2, side by side 1/3-2/3, full screen)
• Chroma colorization with multiple color maps
• Cineloop review for retrospective analysis of M-mode data
• 256 gray levels

Color Doppler mode

• Available on all imaging transducers
• Automatically adapts transmit and receive bandwidth processing based on the color box position
• Cineloop review with full playback control
• Steering on linear array transducers
• Color flow M mode display for tissue motion and flow velocity*(optional)*
• Selectable in baseline, line density, flash reduction, persistence, maps, frequency, PRF, wall filter, packet size, color level, sensitivity, focus position, acoustic power, and smooth
• Color gain
• Region of interest

• Baseline invert
• Simultaneous mode during PW mode
• Smoothing
• Wall filter
• Zoom

Power Doppler mode

• High sensitive mode for small vessel visualization
• Available on all transducers
• Cineloop review
• Multiple color maps
• Individual controls for gain
• Selectable baseline, line density, flash reduction, persistence, maps, frequency, PRF, wall filter, packet size, color level, sensitivity, focus position, acoustic power, and smooth
• Adjustable region of interest

Pulsed Wave (PW) Doppler

• Ultra high resolution spectral FFT rate
• Angle correction with automatic velocity scale adjustment
• Normal, invert display around horizontal zero line
• Selectable gray filter, dynamic range, frequency, PRF, wall filter, baseline, angel correct, sample volume
• Selectable sweep speeds: 8 steps
• Maximum velocity range: 12m/s
• PW acoustic output: 0-100%
• Selectable low frequency signal filtering with adjustable wall filter settings
• Selectable grayscale curve for optimal display
• Selectable chroma colorization maps
• Selectable display format prospective or retrospective (1/3-2/3, 1/2-1/2, 2/3-1/3, side by side 1/2-1/2, side by side 1/3-2/3, full screen)
• Auto function to optimize spectral Doppler displ.
• Digitally enhanced stereo output
• 256 gray levels
• Post-processing in frozen mode includes map, baseline, invert and chroma
• Simultaneous or duplex mode of operation
• Simultaneous 2D, color Doppler, pulsed Doppler
• High PRF capability in all modes including duplex and triplex

Continuous Wave Doppler (CWD)

• Cardiac sector array transducer only
• Maximum velocity range: 18.5m/s

Elastography imaging*(Optional)*

• Shows the spatial distribution of tissue elasticity properties in a region of interest to estimate the strain before and after tissue distortion caused by external force
• The strain estimation is scaled by color to have smooth distribution display
• Have quality index to indicate if there is proper external force

Contrast imaging*(Optional)*

• Support contrast imaging in both 2D and 3D volume
• By contrast agent, imaging is enhanced within vessel which agent flow

• Have one button push to destroy the agent. Useful in the bubble wash-in characteristics of anatomy being scanned

3D/4D

• 3D/4D rotation
• Grayscale imaging controls
• Selectable rendering approaches
• Unique high quality rendering algorithm
• Selectable gray maps
• Multi slide cutting (MCUT)
• Cineloop 3D
• Review volume

PView

• Real time extended field of view composite imaging
• Ability to back up and realign the image during acquisition
• Full zoom, cineloop review and image rotation capabilities
• User can measure distance and area
• Measurement can be made on individual frames during cineloop review
• Available on linear transducers

TView

• Expand view of scanning
• Available on linear transducers

Auto

• Intelligent one button automatic optimization in 2D and Doppler modes
• Automatically adjust PRF and baseline in Doppler

Tissue Doppler Imaging (TD) *

• Present wall motion spectrum by using Doppler principle
• Provide wall motion direction and velocity information
• Available on all sector transducer for cardiac imaging
• Gain

Tissue Velocity Imaging (TVI) *

• Color codes the velocities in tissue
• Present tissue color imaging by using Doppler principle
• This color image is overlaid onto the 2D image
• Captures low flow but high amplitude signals associated with wall motion
• Available on all sector transducer for cardiac imaging
• Tissue velocity M mode display for wall motion(optional)
• Gain
• Velocity

Touch Panel Interface

2D mode

- New patient
- BodyPattern
- Archive
- Comments
- End exam
- Sys setting
- Probe&App
- Pview
- Tview
- Fullscreen
- L/R
- U/D
- Center line
- VTissue
- VSpeckle
- VFusion
- Gray Filter
- Persistence
- Display Format
- Image reference
- Maps
- Frequency
- Focus position
- Focus #
- Dynamic Range
- Line density
- VSharpen
- Biopsy
- Image angle
- Focus width
- Smooth
- Acoustic power
- Contrast imaging
- Elastosonography
- EdgeEnhance
- Vnear
- NeedleEnhance
- SGC

M Mode

- New patient
- BodyPattern
- Archive
- Comments
- End exam
- Sys setting
- Probe&App
- L/R format
- U/D format
- Maps
- Dynamic range
- Acoustic power
- Sweep speed
- Gray filter
- VSharpen
- ECG

CF mode

- New patient
- BodyPattern
- Archive
- Comments
- End exam
- Sys setting
- Probe&App
- Invert
- Full Screen
- L/R
- U/D
- Baseline
- Flash Reduction
- Line density
- Persistence
- Display format
- Sync display

- Transparency
- Image reference
- Maps
- Frequency
- PRF
- Wall filter
- Packet size
- Colorlevel
- Sensitivity
- Focus position
- Acoustic power
- Smooth

PW/CW mode

- New patient
- BodyPattern
- Archive
- Comments
- End exam
- Sys setting
- Probe&App
- Invert
- Triplex
- Display format
- Sweep speed
- Gray filter
- Dynamic range
- Trace sensitive
- Auto trace
- Mode/direction
- Maps
- Frequency
- PRF
- Wall filter
- Baseline
- Steer
- Sample volume
- Volume
- Spectrum optimize
- Acoustic power

3D mode

- Comments
- BodyPattern
- Back to 2D
- Start3D
- Render
- Display format
- Image reference
- View
- Gray map
- VSpeckle
- Quality
- Threshold
- Transparency
- Volume angle
- Auto rotate (after data acquisition)
- Movement step (after data acquisition)
- Slice position(after data acquisition)
- Speed(after data acquisition)
- HQ Light(after data acquisition)
- Rotation angle (after data acquisition)
- Rotation direction (after data acquisition)
- 3DMcut(after data acquisition)
- Magic Cut (after data acquisition)
- Free View(after data acquisition)
- Smart Touch 3D/4D operation(after data acquisition)

4D mode

- Comments
- Body Pattern
- Back to 2D
- Start 4D
- Auto Cine
- Movement step
- Rotation direction

- Render
- Display format
- Image reference
- View
- Gray map
- VSpeckle
- Quality
- Threshold
- Transparency
- Volume angle
- Slice position(after data acquisition)
- 3D Mcut(after data acquisition)
- Smart Touch 3D/4D operation(after data acquisition)

System Feature

Display modes

- Simultaneous capability
  - 2D/PW/CW
  - 2D/CF or PDI
  - 2D/M
  - Dual, 2D/2D
  - Dual, 2D/2D+CF or PDI
  - Dual, duplex and triplax
  - Duplex and Triplex mode
  - Quad display in 3D/4D application
  - 9 slice images display in 3D/4D application
- Time line display
  - Independent dual 2D/PW or CW
  - Timed based sweep update mode

Display annotation

- Institution/hospital name
- Date: 2 types selectable, YY/MM/DD, MM/DD/YY
- Time: 2 types selectable, 24hours and 12 hours
- Operator identification
- Patient name, first, last
- Patient identification: 30 characters
- Gestational age from LMP/EDC/GA/BBT
- VINNO image symbol: Ginkgo leaf
- Power output index
  - MI: mechanical index
  - TIS: thermal index soft tissue
  - TIC: thermal index cranial (Bone)
- TIB: thermal index bone
- Probe orientation marker: coincide with a probe orientation marking on the probe
- Gray/color bar
- Measurement result window
- Probe type
- Application name
- Image depth
- Imaging parameters by mode
  - 2D/M mode: acoustic power output, gain, frequency, frame rate, dynamic range
  - Color mode: color acoustic power output, color gain, color flow frequency, PRF, wall filter
  - PW/CW mode: Doppler acoustic power output, Doppler gain, Doppler frequency, PRF, wall filter, sample depth
- Scanline Gain Compensation(SGC) with 6 slides adjustment
- Focus zone marker
- Body pattern
- PW and CW scale markers: time/speed
- M scale markers: time/depth, time
- System measurement display
- System message display
- Biopsy guide line
- Heart rate

Simple User Operation Interface

• Simple user interface and easy workflow, allows one step on probe & application switch, and intuitive user parameter control

Cineloop

• Acquisition, storage in memory and display of up to 15000 frames, 1500 seconds long of 2D, color and PW/CW images for review
• Acquisition, storage and replay of Doppler audio

Compare

• Flexibly compare live imaging with stored imaging by one key

Quick save feature

• The system provides quick save function through USB stick, internal/external HDD, DVD during or after exam
• Configurable saving file format, VRD (VINNO Raw Data), DICOM, PNG,BMP,JPG and AVI

Physio

• One 3-lead ECG input
• Gain, sweep rate and display position controls
• Automatic heart rate calculation and display
• Fault condition display

Archive

• Patient data input which include patient ID, name, nationality, birth date, sex, exam physician, quality check, exam operator
• Physical data such as weight, height
• Patient exam management
• Patient exam images storage and management
• Import VRD format data into the system from outside media, such as USB stick, external HDD, DVD
• Export patient data into outside medias

Report

• Automatically pull patient data into the report
• Automatically load measurement worksheet into the report
• Pull related exams' images into the report
• Write comments in the report
• Print report through network or local printer

Connectivity

• Standard connectivity features
  • Local print to on-board or off-board video printers through USB port
  • Page report print
  • Image export to removable media (DVD, external HDD, USB stick)
• Network linkage
  • Image export to network storage servers*
  • DICOM export and retrieve *
• Mobile data transfer solution by
  • Blue tooth*(Optional)
  • email*(Optional)
  • Hot point connection
• VCloud * (Optional)
• Integrated DVDRW
  • Support standard DVD media
  • Data storage formats include VRD, DICOM, JPG,BMP,PNG, AVI
  • JPG,BMP,PNG,VRD and DICOM images stored in disc can be recalled on the VINNO system
  • PNG and AVI images can be played on normal computers

• On-board patient exam storage
    • Direct digital storage of static image or cineloop images to internal hard disk drives
• Fully integrated user interface

Probes/application

• Selectable multiple applications
• Edit exist application preset
• Edit user defined preset
• Rename preset
• Return to factory preset
• Quick save user defined parameters in related application

Safety Conformance

• Regulatory Notice:
This device is tested to meet all applicable requirements in relevant. According to 93/42 EEC, it is class IIa medical device.
• Conformity to Standards:
    • IEC 60601-1 E3:2005 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
    • IEC 60601-1-1:2000 Safety requirements for medical electrical systems
    • IEC 60601-1-2:2007 Electromagnetic compatibility - Requirements and tests
    • IEC 60601-1-4:2000 Programmable electrical medical Systems
    • IEC 60601-1-6:2010 Usability
    • IEC 60601-2-37:2005 Medical electrical equipment Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment
    • IEC 61157:2007 Declaration of acoustic output parameters
    • ISO 10993-1:2009 Biological evaluation of medical devices
    • IEC 62366:2007 Medical devices Application of usability engineering to medical devices
    • Council Directive 93/42/EEC on M.D.
    • Directive 2002/96/EC on Waste Electrical and Electronic Equipment
    • Directive 2006/42/EC on Machinery

Measurement and Analysis

Generic Measurement in 2D mode

• Depth
• Distance
• Perimeter
    • Length and width method
    • Ellipse method
    • Polygon method
    • Spline method
    • Tracing method
• Area
    • Length and width method
    • Ellipse method
    • Polygon method
    • Spline method
    • Tracing method
• Volume
    • Single line method
    • Dual line method
    • Triple line method
    • Single ellipse method
    • Single ellipse and single line method
• Angle
• Stenosis
    • Diameter method
    • Square meter method

- A and B ratio
    - Diameter ratio
    - Square meter ratio

Generic Measurement in CFM mode

- CFV
    - point
    - profile

Generic Measurement in M mode

- Depth
- Distance
- Time
- Speed
- Heart rate
- Stenosis
- A and B ratio
    - Diameter ratio
    - Time ratio
    - Speed ratio

Generic Measurement in PW mode

- Speed (include PV (Peak Velocity))
- Time (include AT (Accelerate Time))
- Acceleration
- PS (Peak Speed in systole period)
- ED (The speed in the end of diastole period)
- MD (Minimum speed in diastole period)
- TAMAX (maximum speed in time average)
- TAMEAN (mean speed in time average)
- TAMIN (minmum speed in time average)
- PI (Pulsatility Index)
- RI (Resistance Index)
- PS and ED ratio
- ED and PS ratio
- A and B ratio (A/B ratio)
    - Speed ratio
    - Time ratio
    - Acceleration ratio
- FLOWVOL (Flow Volume)
- MaxPG (maximum pressure gradient)
- MeanPG (Mean pressure gradient)
- SV (Stroke Volume)
    - Each volume diameter cardiac
    - Time mean speed in each stroke volume
    - Cardiac output
- Heart rate

Abdominal Measurement

- General abdomen
- Difficult abdomen
- Kidney
- Renal vessel
- Abdominal trauma

Small Part Measurement

- Thyroid
- Breast
- Testis
- Musculoskeletal
- Upper and lower extremity joint
- Nerve block

Vessel Measurement

- Carotid artery
- Upper artery
- Upper vein
- Lower artery
- Lower vein
- Vessel puncture
- Transcranial Doppler

Gynecology Measurement

- Uterus and Plevis
- Follicle

Urology Measurement

- Bladder
- Prostate
- Renal
- Kidney and ureter
- Pelvic Floor dysfunction

Pediatric Measurement

- Neonatal Head
- Neonatal Abdomen
- Pediatric Abdomen
- Pediatric Hip
- FAST

Obstetrics Measurement

- OB Early
- OB Mid
- OB Late
- Fetal Heart

Cardiac Measurement

- General
- LV
- MV
- Ao
- AV
- LA
- RV
- TV
- PV
- RA
- System

VINNO Technology (Suzhou) Co., Ltd

VINNO is focusing on producing premium diagnostic ultrasound development to provide customer clinical value through ***Continuous Innovation, Excellent Performance and Accessible Solutions***.

Thanks you for your interest in VINNO. You can contact us by phone and email (below) or contact our local representatives.

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