# General Informations

## Dimensions and Weight
- Dimensions of main unit (approx.): 850mm x 620mm x 1400mm
- Net weight of main unit (approx.): 95kg (no probe included)

## Electrical Power
- Power supply voltage: Auto adaptable for AC100V-240V
- Power supply frequency: 50/60 Hz
- Power consumption: 600 VA

## User Interface

### Operation Panel
- Control panel
- Alphanumeric keyboard
- 8 TGC Slides
- Interactive backlit keys
- Touch screen: 10.4 inch
- Gel warmer
- Up and down
- Left and right

### Display Screen
- High resolution color LCD
  - Diagonal dimension: 19.0 inch
  - Brightness and contrast adjustment
# System Overview

## Applications
- Abdomen
- Gynecology
- Obstetrics
- Urology
- Small Part
- Pediatrics
- Vascular
- Musculoskeletal
- Cardiac

## Scanning Method
- Electronic convex
- Electronic linear
- Electronic micro convex
- Electronic phased array
- Volume convex
- Multi elements probe **

## Transducer Types
- Convex transducers: D3C60L
- Linear transducers: D7L40L, D12L40L
- Micro convex transducers: D6C12L, D7C10L, D5C20L, D3C20L, D6C15L
- Phased array transducers: D3P64L, D6P64L
- Pencil probe: D2D16L **
- Volume probe: V4C40L,
- Multi elements probes **

## Image Modes
- B mode
- B steer mode
- THI mode
- M mode
- Free steer M (option)
- B/M mode
- Elastography mode (option)
- PW (Pulse Wave Doppler) mode
- HPRF mode (option)
- CW mode
- CFM mode
- CPA (Power Doppler) mode
- DPD (Directional Power Doppler) mode
- 4D mode (option)
- Trapezoidal imaging mode (only for linear probe)
- B/BC mode
- Panoramic imaging (option)
- TDI mode
- ECG (option)

## Display Annotation
- Institution/Hospital name
- Date/Time
- Patient Name and Patient ID
- System status (real-time or frozen)
- Gray/Color bar
- Cine guide
- Scanning direction
- Measurement summary window
- Measurement results window
- Probe type
- Frequency
- Application name
- Menu indication
- Trackball functions indication
- Imaging parameters displayed on the screen

## Standard Configuration
- High resolution 19 inch LED display
- High resolution 10.4 inch touch screen
- 4 active probe ports
- Pulse Wave Doppler
- Color Doppler Flow Imaging
- Power Doppler Flow Imaging
- ≥250G integrated hard disk
- USB ports: 8 (4 in the control panel, 4 at the rear panel)
- Ethernet port
- S-video out port
- Foot switch
- Audio out port
- Remote
- Video out port
- VGA out port
- HDMI out port
- DVI out port
- General measurement package
- Clinical measurement package
- Multi-language screen display
- EasyViewTM: image archive system
- Patient information management system
- Building reporting system
- AIO (Automatic Image Optimization)
- Intelligent Zoom
- Speckle Reduction Algorithm (SRA)
- Multiple Compound Imaging (MCI)
### Imaging Processing and Presentation

#### B Mode
- **Acoustic power (0~100%)**
- **Gain (0~255)**
- **TGC (8 segments)**
- **Depth (3.70~31.21 cm, depend on the probe types)**
- **Frame rate (up to 963 f/s, depend on the probe types)**
- **Focus number (1~4, depend on the compound)**
- **Focus position**
- **Scan width (16 steps)**
- **Line density (Low, High)**
- **Dynamic (60~165 dB)**
- **Persistence (0~7)**
- **Noise rejection (0~255)**
- **Smooth (0~7)**
- **Edge enhancement (0~6)**
- **i-Image(TM) (0,1,2,3,4)**
- **SRA (On, Off)**
- **Compound (on, off)**
- **Gamma (0~8)**
- **Image rotate (0º, 90º, 180º, 270º)**
- **Flip (left/right, up/down)**
- **Zoom**
- **B steer (-20~20)**

#### M Mode
- **Color Map (10 types)**
- **Sweep speed (4 steps)**
- **Layout (UD,LR)**
- **Steer M (Off,1,2,3)**

#### Color Mode
- **Gain (0~255)**
- **Frame rate**
- **Steer (-20º~20º, transducer dependent)**
- **PRF (1369Hz~11KHz) (depend on the exam mode types)**
- **Scale (±8.78 cm/s~±163.79 cm/s, transducer dependent)**
- **Color Map (10 types)**
- **Wall Filter (0~3)**
- **Flow (Extra Low, Low, Middle, High)**
- **Color Invert (On, Off)**
- **Density (Low, High)**
- **Persistence (0~7)**
- **Baseline (7 steps)**
- **Wall Thre (0~15)**
- **Packet Size (0~8)**
- **Blood Effection: Smooth, HighRes**
- **Color mode: Velocity, Variance**

#### CPA/DPD Mode
- **Gain (0~255)**
- **Frame rate**
- **Steer (-20º~20º, transducer dependent)**
- **PRF (456Hz~14.7KHz) (depend on the exam mode types)**
- **Color Map (2 types)**
- **Wall Filter (0~3)**
- **Flow (Extra Low, Low, Middle, High)**
- **Density (Low, High)**
- **Persistence (0~7)**
- **Wall Thre. (0~15)**
- **Packet Size (0~8)**

#### PW Mode
- **Gain (0~255)**
- **PRF (2737Hz~15KHz)**
- **Scale (±1.88 cm/s~±1039.3 cm/s, transducer dependent)**
- **Invert (On, Off)**
- **Wall Filter (0~3)**
- **Audio (0~100%)**
- **Speed (3 steps)**
- **Baseline (7 steps)**
- **DA (0º~80º)**
- **SV (1~8 mm)**
- **Color Map (10 types)**
- **2D Map (15 types)**
- **Spectrum Enhance (0~3)**
- **Dynamic Range (46~67)**
- **Triplex (On, Off)**
- **DVmean (On, Off)**
- **DVmax (On, Off)**
- **Auto Cal (On, Off)**
- **DTrace Smooth (0~3)**
- **Threshold (1~5)**
- **TraceArea (All, Above, Below)**
### CW Mode
- **Gain** (0~255)
- **PRF** (2000Hz~50KHz)
- **Scale** (±7.52cm/s~±5542cm/s, transducer dependent)
- **Invert** (On, Off)
- **Wall Filter** (0~3)
- **Audio** (0~100%)
- **Color Map** (10 types)
- **Speed** (3 steps)
- **Baseline** (7 steps)
- **2D Map** (10 types)
- **CWDFFT** (0~15)
- **CWDEnhance** (0~7)
- **Dynamic** (45~80)
- **DA** (0°~80°)

### Cineloop
- Support 2D, M, PW, CFM, CPA, DPD, CW
- Simultaneous and independent review in duplex mode
- Cineloop auto/manual
- Variable cine playback speed
- User-define start and end frame of cine storage
- User-define start and end frame of cine review
- Permanent storage in hard disk and display in real-time modes
- Slide show: slides show function

### Storage
- ≥250GB integrated hard drive
- DVD R/W driver
- USB ports
- Still images storage format: image and DCM
- Still images export format: BMP, JPG, DCM,PNG,TIFF
- Cine loops storage format: Cine and DCM
- Cine loops export format: Avi

### EASYVIEW™
- Image review Layout: 1x1, 2x2
- Image management
  - Delete selected image
  - Export selected image
  - Send selected image to demo
- Print selected image by PC printer
- Print selected image by DICOM printer
- Send selected image by DICOM
- Selected all
- Selected none

### Exam Review
- Search Exam
- Exam review: patient view, study view
- Exam management
  - Delete selected exam
  - Export selected exam
  - Backup selected exam backup
- Selected all
- Expand all
- Collapse all
- Edit selected Exam
- Review selected Exam
- Continue selected Exam
# Measurement & Calculation

## General Measurement Package
- Software packages for various specific clinical use
- Comprehensive analysis methods
- Clinical analysis reports
- AUTO measurement: AUTO IMT, AUTO TRACE in FREEZE and UNFREEZE PW mode

### General measurement package
- General B mode measurement
  - Distance
  - Length Area (Ellipse)
  - Volume (1 Distance)
  - Volume (2 Distance)
  - Volume (3 Distance)
  - Volume (1 Ellipse)
  - Volume (2 Ellipse)
  - Volume (1 Distance 1 Ellipse)
  - Ratio
  - Angle

### General M mode measurement
- Mdistance
- MTIme
- Velocity
- Heart Rate

### General PW mode measurement
- Velocity
- Peak
- Full trace / Manual Trace
- STD%
- STA%
- ICA/CCA
- Flow Volume
- HR

## Clinical Analysis Packages

### Obstetrics
- Distance
- Fetal Biometry
- Fetal Long Bones
- Fetal Cranium
- OB Others
- AFI
- FBP
- Fetal Select
- Ductus Venosus
- CX _ L
- Aorta
- Descending Aorta
- Umb A (Umbilical Artery)
- MCA (Middle Cerebral Artery)
- Uterine Artery
- Pulmonary Artery
- GYN

### GYN
- Distance
- UT
- Cervix Vol.
- ENDO
- Left OV Volume
- Right OV Volume
- Left FO D
- Right FO D
- Uterine Artery
- Pediatrics
- HIP

### Urologic
- Distance
- Residual Vol.
- Prostate Vol.
- Left Kidney
- Right Kidney
- T-Zone Vol.
- Bladder Vol.
- STA%
- STD%
- Vessel Area
- Vessel Dis

### Cardiac
- Single Plane
- BiPlane
- Bullet Volume
- Modi Simpson
- Teichholz
- Cube
- LV
- LVSHORT
- AV
- AVSHORT
- MV
- PV
- TV

### Vessel
- ICA
- ECA
- CCA
- Vertebral A
- INT ITL
- EXT IL
- ILIAC
- CFA
- ProFun
- LTCIR
- SFA
- POP A
- ATA
- PTA
- PERON
- DRFED

### Abdomen
- CBD
- GB Wall
- Liver Length
- Aorta
- Spleen
- Renal Vol.
- ILIAC

### Carotid
- Subclavian A
- CCA
- Bulb
- ICA
- ECA
- Vertebral A
- General Measurement
- Flow Volume
System Setup

By using system Setup, users could
- Customize hospital information
- Customize language
- Customize fast storage time
- Customize color map
- Assign functions to “PRINT” button on control panel and foot switch
- Customize comment library
- Customize report

User Define Functions

By user-define function, users could customize user-define preset, including
- Applications name, Presets name, User defined name
- Applications exam type
- Imaging parameters

Multi-language

- English
- Chinese
- Polish
- Portuguese
- Russian
- Spanish
- Danish
- German
- French

Inputs & Outputs

Input/Output
- AC power in: 1
- Audio: L, R
- S-video: 1
- Video out: 1
- VGA out: 1
- USB port: 8
- Ethernet: 1
- Remote control: 1
- Footswitch port: 2
- Ground pole: 1
- Power button: 1
- HDMI: 1
- DVI: 1

Operating Conditions

Operating Conditions
- Ambient temperature: 10°C to 40°C
- Relative humidity: 30% to 85% (no condensation)
- Atmospheric pressure: 700 hPa to 1060 hPa

Storage Conditions

Storage conditions
- Ambient temperature: -5°C to 45°C
- Relative humidity: 30% to 85% (no condensation)
- Atmospheric pressure: 700 hPa to 1060 hPa
Not all features or specifications described in this document may be available in all probes and/or modes