

HY-M60

Full Digital Color Doppler Ultrasonic Diagnostic System

System Overview

Application

Abdomen
Cardiology
Obstetrics
Gynecology
Urology
Small Parts
Vascular
Pediatrics
Musculoskeletal

Electrical Power

Voltage: 220V±22V
Power: 120V
Frequency: 50Hz±1Hz

Physical Specifications:

Equipment Size:
350×365×83mm
Weight: 5.8kg
Backlit Keyboard

Conditions

Operating
Temperature: 5°C~40°C
Humidity: 30%~80%
Pressure: 86kPa~106kPa
Storage
Temperature: -5°C~40°C
Humidity: <80%
Pressure: 86kPa~106kPa

Connectivity/Media/Peripherals

Transducer Ports: 2
USB Ports: 2
Hard Disc: ≥60GB (SSD)
External Display: VGA
S-Video Output
Video Printer (Option)
Digital Laser/ inkjet Printer (Option)
Mobile DVD/CD R/W (Option)
Built in Battery

Cine/Image Memory

Cine loop: ≥1024 frames (up to probe or mode)
Cine Loop: manual/automatic

DICOM & EMR Connectivity(Optional)

DICOM3.0 Compliant

Image Storage

Storage Format:
PNG, BMP, JPEG, DICOM
Export Video Format:
WMV,MP4
Export Image Format:
PNG, JPEG, BMP, DICOM
Cine Frame Capacity:
> 8000 frames
Stored Image Capacity:
> 50000 images

Technology

Tissue Specific Imaging
Convex Extended Imaging
Trapezoid Imaging
Spatial Compound Imaging
Speckle reduction Imaging
Panoramic Imaging (Optional)
3D/4D Imaging (Optional)
B, B|B, 4B, B|M, M
CF
PDI,DPDI
PW
CW(Optional)
B+CF
M+CF
Anatomic M(Optional)
Color M
Duplex, Triplex
HPRF
THI,IHI
PIP



Image Processing

System Frequency Range: 2.0~12MHz
Digital Processing Channel: 4080
Grey Scale: 256
Multi-beam form Imaging
High Line Density
8 sliders TGC Control
Dynamic Range: ≥120 dB
Overall gain control
M mode sweep speed control
Acoustic power control
Variable frame averaging
Gamma control
Negative / positive control
Echo enhancement control
Scan direction, rotation, up-down controls

Pan/Zoom

Real-Time Image Zoom
Zoom Range: 100%~400%

Hardware Specification

LCD Monitor

Size (Diagonal): 15"
Resolution: 1024×768 pixel
Brightness: 230 cd/m²
Color Depth: 24bit
Grey Levels: 256

Embedded Computer

System: Windows 7
CPU:
Celeron 1037u@1.8GHz

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Embedded Speakers

Impedance: 4Ω
Power: 5 W

Imaging Performance

Startup Time (Max):
Avg. < 90 seconds
Preset Switching Time:
Avg. < 1 second
Storage Time (Image to Disk):
Avg. < 0.5 second

Transducers

Convex Array Probe

Frequency:
Central 3.5 MHz
Min. 2.0 MHz
Max. 5.5 MHz

Scanning Angle: 60,
Max depth: ≥23cm

Linear Array Probe:

Frequency:
Central 7.5 MHz
Min. 6.0 MHz
Max. 12.0 MHz

Scanning Length: 38mm

Transvaginal Probe:

Frequency:
Central 6.5 MHz
Min. 5.0 MHz
Max. 9.0 MHz

Scanning angle: 150°

Phased Array Probe:

Frequency:
Central 3.0 MHz
Min. 2.0 MHz
Max. 5.5 MHz

4D Volume Probe

Frequency:
Central 4.0 MHz
Min. 2.0 MHz
Max. 5.5 MHz

Software Specifications

Software Languages

English
Chinese

User Interface

Cine Playback
Exam Review
Pictograms (Body Marks)
System Setup
Editable report

Scanning Mode

B Mode:

Freq: 1.6-4MHz
Dyn. Range: 36db-120db
Gain: 1%-100%
Depth: 2-30cm
Power: 1%-100%
Speck. Red: off/CV1-CV9
Image Enhance: 0-4
Gamma: 0.6-2.0
Palette: 1-9
Focus Num: 1-4
Focus Gap: 1-4
Frame Avg: 1-8
Color Map: 0-36
Line Density: 7
Brightness: -50%-50%
Contrast: -50%-50%
Rotation: 90°, 180°, 270°, 0°
Centerline: On/Off
Full Screen: On/Off
PIP: On/Off

M Mode:

Freq: 1.6MHz-4MHz
Dyn: 36db-120db
Gain: 1%-100%
Depth: 2-30cm
Power: 1%-100%
Updown Invert: On/Off
Brightness: -50%-50%
Negative: On/Off
Gamma: 0.6-2.0
Palette: 1-9
Sweep Speed: 1-5

CF Mode

Freq: 2.0MHz-4.0MHz
Power: 1%-100%
Gain: 1%-100%
High PRF: On/Off
Packet Size: 1-16
Wall Filter: 0Hz-800Hz
PRF: 0.5KHz-5.0KHz
Palette: 1-10
Color Avg.: 1-8
Spatial Filter: Off/1-4
Line Density: 1-5
Baseline: 0-255
Pulse Length: 2-8
Dyn. Range: 36db-120db
Color Threshold: 1-255
Transparency: On/Off
Color Priority: 0-255
Color Invert: On/Off
Color Invert: On/Off
Variance: On/Off
Lighting: On/Off

PW Mode

PW Sample Volume position and size
Gain: 10%-100%
PRF: 0.5-5kHz
Steer Angles: -25°~+25°
Power: 1%-100%
Wall Filter: 2-20
Angle Correct: -89-89
SV Length: 0.5-10mm
Baseline: 0-255
Invert: On/Off
Speed: 50-400
Auto Trace: On/Off
Audio Volume: 10-100
Use Duplex/Triplex: On/Off
Signal Scale: 0-15
Dynamic Range: 30-200
Color Map: 1-12
Negative: On/Off
Single Smooth: 0-7
Spectral Average: 0-1
Right/Down: On/Off

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PDI/DPDI Mode

Gain: 10%-100%
 PRF: 0.5-10kHz
 Steer Angle: -25°~+25°
 Power: -20-0db
 Wall Filter: 2-20
 Packet Size 1-16
 Pulse Number:
 Palette: 1-10
 Color Average: 0-7
 Color Priority: 0-255
 Dynamic Range: 20-180
 Line Density: 1-5
 Spatial Filter: 1-4
 Frequency:
 Color Threshold: 1-127
 Transparency: On/Off

Analysis Packages

Generic
 Abdomen
 OB
 Cardiac
 GYN
 Urology
 Vascular
 Small Parts
 Musculoskeletal

Measurements Specifications

Basic Measurement

B-mode basic measurement:
 Stenosis, A/B Ratio, Length, Circ, Area,
 Volume, Angle, Histogram, Anatomy, IMT
 M-mode basic measurement:
 Stenosis, A/B Ratio, Time, Distance, Heart
 Rate, velocity
 PW-mode basic measurement:
 Trace, Point, Distance, Volume Flow

Abdomen

Abdomen B mode: liver ,gallbladder, pancreas,
 spleen, GI tract, bladder, left kidney, right
 kidney, Pelvis, Portal V Diam, Aorta Diam
 Abdomen D mode: HR, renal, Ab A, Ab V,
 volume flow
 Abdomen Ultrasound Report

Obstetrics

OB B Mode:
 OB Early: GS, YS, BPD, CRL, FL,NT,AF,FHR,
 LMP,GA(LMP), EDD(LMP), EFW,
 GA(AUA),EDD(AUA)
 OB MID/FULL Term: BPD,HC,AC,FL,HL,PL
 Thickness, AFI, NT, FHR, Physiology, Skeleton,
 Head, Heart, LMP,GA(LMP), EDD(LMP), EFW,
 GA(AUA),EDD(AUA)
 OB D Mode:
 Umb.A, Duct Venos, Duct Art, Placenta A, MCA,
 Fetal Ao, Desc Ao, Ovarian A, Lt Ut Art, Rt Ut
 Art, FHR, Volume Flow
 Obstetrics Report

Gynecology

GYN B Mode: Left Ovary, Right Ovary, Follicle,
 Uterine Cervix, Uterine, UT Line, Endo
 GYN D Mode: Acceleration, HR, Time Interval,
 PS/ED, TMean, TMax, TMin, PGmax, PGmean,
 VTI, RI, PI, Volume Flow, Lt Ut Art, Rt Ut Art
 Gynecology Report

Urology

Left Kidney, Right Kidney, Bladder, Residual Urine
 Vol. Prostate,PSAD,Testis
 Urology Report

Vascular

CCA,Arteria Carotis, UE A,UE V,LE A, LE
 V,IMT,Volume Flow ,Vessel
 Peripheral Vascular Report

Small Parts

Small Parts B Mode: Thyroid, Galactophore,
 Testis,
 Small Parts D Mode: Thyroid STA, Thyroid ITA
 Small Parts Report

Musculoskeletal

Hip Angle
 Femoral Head Coverage
 Musculoskeletal Report

Cardiac

Cardiology B Mode: LA Diam, Ao Diam,
 ACS,RVOT, Diam RVDd, EPSS, LVOT Diam, MCS,
 MV Diam, MPA Diam, LA/AO, Left Ventricle, Right
 Ventricle, LV Mass, Simpson SP, LV Mass, Simpson
 SP PISA
 Cardiology M Mode: IVSd, LVIDd, IVSs, LVIDs,
 LVPWs, HR, EDV, ESV, Body Surface
 Area ,SV,FS,SVI,EF,CO,CI
 Cardiology Report

Certificates:

ISO9001
 ISO13485