mindray

Datasheet

2019.09

Z6 Vet/ Z60 Vet
Diagnostic Ultrasound System

System Description

The Z6 Vet/ Z60 Vet is intended for veterinary use in ultrasound examination and diagnosis.

General Specification

Dimensions and Weight

- Size: 147±5mm×361±5mm×358±5mm (Depth × Width × Height)
- Net Weight: 8.2±0.5kg (without battery, two probe ports)

Electrical Power

Input power

- Voltage: 100-240V~
- Frequency: 50/60Hz
- Input current: 1.5- 0.8A

Battery

- Lithium-ion Battery Pack: 14.8 V ⎓ , 6600 mAh
- Charge time: < 3 hours (connected on AC power supply, with the system powered off)
- Endurance time: > 100 min

Boot time

- Boot time: >38 s
- Wake up time (from standby): >7 s

Operating Environment

Ambient temperature: 0°C ~ 40°C
Relative humidity: 30% ~ 85% (no condensation)
Atmospheric pressure: 700 hPa ~ 1060 hPa

Storage & Transportation Environment

Ambient temperature: -20°C ~ 55°C
Relative humidity: 30% ~ 95% (no condensation)
Atmospheric pressure: 700 hPa ~ 1060 hPa

Probe

Probe Types

- Convex array
- Linear array
- Phased array

Scanning Methods

- Electronic convex with extend FOV
- Electronic linear with slant scanning and trapezoid
- Electronic sector

Probe Model

3C5P	Convex
6C2P	Convex
6CV1P	Convex
7L4P	Linear
7L5P	Linear
L14-6P	Linear
CB10-4P	Bi-plane (convex & convex)
V10-4BP	Convex
7LT4P	Linear
6LE7P	Linear
2P2P	Phased array
6LE5VP	Linear
P7-3P	Phased array

Available Needle-guided Bracket for Probe:

6CV1P	NGB-004
CB10-4P	NGB-004
V10-4BP	NGB-004
6C2P	NGB-005
3C5P	NGB-006
7L4P	NGB-007
7L5P	NGB-007
6LE7P	NGB-009
7LT4P	NGB-010
2P2P	NGB-011
L14-6P	NGB-016

System Configuration

Standard Configuration

- Display
  - 15-inch LCD, High-Resolution 1024 x 768
  - Contrast & Brightness adjustable
  - Screen Saver: Time and picture presettable

- Angle adjustable: 60°
- Control Panel
  - Alphanumeric Keys
  - Function Keys
  - Knobs
  - User-defined Keys: function presettable
  - 8 segment TGC
  - Trackball: Color& Speed presettable
  - Key Backlight Brightness & Volume presettable
  - Integrated Speakers
- Indicators: Power/Battery/Standby/HDD status
- Handle
- Phase Shift harmonic imaging
- Steer scanning for linear probes (2D Steer)
- iBeam™
- iClear™ (Speckle Suppression Imaging)
- iTouch™
- ExFOV Imaging
- iStation™
- 500G integrated hard disk
- I/O Interfaces
  - Transducer port: 2
  - Power input port: 1 (Connect to the AC power supply)
  - USB port: 4
  - VGA OUT port: 1
  - Video OUT: 1
  - S-Video OUT: 1 (Separate video output)
  - Ethernet port: 1 (Connect to network)
  - Remote control port: 1
  - Equipotential terminal: 1
- Multi-language screen display and control panel overlay
- Application categories
  - Abdomen
  - Cardiology
  - Small Part
  - Vascular
  - Reproduction

Accessories

- Operator's manual
  - Basic Volume
  - Advanced Volume
  - Operation Note
- Gel
- Power cord
- Probe holder
- Dust-proof cover
- Grounded Cable
- Video Printer Remote Cable

System Language

- Software display and keyboard input available: Chinese/English/Russian/Czech/Polish
- Software display available only German/Spanish/French/Italian/Portuguese/Icelandic/ Norwegian/Swedish/Finnish/Turkish/Danish/ Indonesian
- Control panel overlay available: Chinese/German/Spanish/French/Italian/Portuguese /Russian/Czech/Polish

Options

- CW module
- ECG module
- iScape View
- Free Xros M (Anatomical M)
- Color/Power
- PW
- Smart 3D
- TDI
- Color M
- Natural Touch Elastography
- iNeedle
- IMT
- DICOM basic
  - Task management
  - DICOM storage
  - DICOM print
  - DICOM storage commitment
  - DICOM media storage (including DICOM DIR)
- DICOM Worklist
- DICOM MPPS
- DICOM Query/Retrieve
- Battery Pack
- External DVD drive
- Footswitch:
  - 971-SWNOM (2-pedal or 3-pedal)
- Mobile trolley: UMT-150
  - Weight: 22 kg
  - Width: 445 mm
  - Depth: 535 mm

- Height: selective (not available after installed): 810 mm, 870 mm, 2 levels
- Mobile trolley: UMT-160
  - Weight: 21 kg
  - Width: 616 mm
  - Depth: 702 mm
  - Height: selective (not available after installed): 1247 mm, 1147 mm, 2 levels
- Carrying Case
- Network accessory package
- Probes
- Needle-guided brackets

Peripherals Supported

- Black and White Video Printer
  - SONY UP-X898MD Analog
  - MITSUBISHI P93W-Z Analog
- Graph / text printer
  HP OFFICEJET PRO 8100
- LAN Accessory
  LPA11

Exam Mode

- ABD
- SMP
- REP
- Cardiac
- Vascular
- MSK

Imaging Mode

- B-Mode
  - Tissue Harmonic Imaging
  - Phase Shift Harmonic Imaging
- Slant scanning for linear probes (B, color/power, PW/CW independent)
- ExFOV Imaging for Convex Probe (trapezoid imaging for linear probe)
- M Mode
- Color Mode
- Power Mode
- PW (Pulse Wave Doppler)
- CW (Continuous Wave Doppler)
- Color M
- Free Xros M Mode
- TDI (Tissue Doppler imaging)
  - TVI (Tissue Velocity Imaging)
  - TEI (Tissue Energy Imaging)
  - TVD (Tissue Velocity Doppler Imaging)
  - TVM (Tissue Doppler Velocity M Mode)
- iScape™ (iScape View)
- Smart 3D
- Natural Touch Elastography
- Display Mode:
  - Single window
  - B/C/D triplex mode
  - Dual live: B/C, B/TDI
  - Adjustable time line display format (V1:1, V1:2, V2:1, Full)
  - Dual-split: B/C, B/TDI, B/M, B/PW
  - Quad-split

Imaging Features

- iBeam™ (Spatial Compounding Imaging for Linear and Convex Probe)
- iScape™
- Multi-frequency probes for 2D imaging modes
- iClear™ (adaptive speckle suppression imaging for all probes)
- iTouch™ (B/PW): Auto Optimization
- TSI (Tissue Specific Imaging)
- iZoom™
- Spot Zoom and Pan Zoom

B Mode

- Display Depth
  - Minimum: 0.9 cm
  - Maximum: 38.8 cm
- Frame rate (Max.):
  - B mode: 400 fps (2P2P)
- Adjustable focus number: 4
- Adjustable focus positions (Max.): 16
- Magnification factor:
  - Spot Zoom: continuously adjustable
  - Pan Zoom: 80%-1000%
- iZoom: instant full screen view, two levels
- System dynamic range: 30~220, 5/step
- Gain: 0~100dB
- TGC: 8
- LGC: 8
- Colorize: on/off

- Tint map: Off, 1~25
- Gray map: 1~25
- FOV: On/ Off, continuously adjustable
- ExFOV: On/ Off (Trapezoid imaging for linear probe)
- Persistence: 0~7
- Rotation: 0°/90°/180°/270°
- L/R, U/D Flip: Left/ Right
- Gray invert: On/ Off
- Line Density: L, M, H, UH
- iTouch Bright: -12~12dB, 3db/step
- A.power: 32steps
- TSI: General, Fat, Fluid, Muscle
- Steer: 3 levels, linear probe only
- HScale: On/ Off
- Middle line: on/ off
- iClear: On/ Off, 1~4
- iBeam: On/Off
- Gray Invert: On/ Off
- Auto Merge: On/ Off, linear probe
- iNeedle
  - Needle steer: 9 levels
  - B/iNeedle: On/ Off

M Mode

- Gain 0-100dB, 51 levels
- A.Power: 32 levels
- Speed: 1~6
- Edge Enhance: 0~14
- M Soften: 0~14
- Dynamic range: 30~220, 5/step
- Gray map: 1~25
- Tint map: Off, 1~25
- Display format: V1:1, V2:1, V1:2, Full

Color Mode

- Frame rate (Max.): 405 fps (2P2P)
- PRF (kHz): 0.1 (2P2P)~ 15.4 (L14-6P)
- Flow velocities (cm/s, probe dependent): 1.0 (2P2P)~ 262.9 (2P2P)
- Gain: 0~100, 2/step
- Baseline: -8~8
- Scale: 30 levels
- Persistence: 0~4
- Smooth: 0~4
- ROI adjustment: continuously
- Map: V0~V10; VV0~ VV9
- Priority: 0%~100%, 11 levels
- WF: 0~7
- Line Density: L, M, H, UH
- Dual Live: On/ Off
- Invert: On/ Off
- B/C Align: On/ Off
- Packet Size: 0~3

Power Mode

- Dynamic Range: 10~70, 5/step
- Power Map: P0~P3; dP0~dP3

PW/CW Mode

- PRF (kHz)
  - PW: 0.7 (7L4P)~ 24.0 (2P2P)
  - CW: 0.4 (2P2P)~ 160.0 (2P2P)
- Flow velocities (cm/s, probe dependent):
  - PW: 0.04 (L14-6P)~ 924 (2P2P)
  - CW: 0.03 (2P2P)~ 6160 (2P2P)
- Gain: 0~100, 2/step
- Baseline: -4~4
- PRF/Scale: 30 levels
- Audio volume: 0~100%, 2%/step
- Angle: -89°~89°
- Quick Angle: -60°~60°
- SVD (CW focus depth): continuously
- Speed: 1~6
- iTouch (PW): On/Off
- SV:
  - 0.5~3 mm, 0.5 mm/step
  - 3~5 mm, 1 mm/step
  - 5~10 mm, 2.5 mm/step
  - 10~20 mm, 5 mm/step
- Dynamic range: 24~72, 2/step
- Gray map: 1-25, 1/step
- Colorize: on/off
- Tint map: on/off, 1-25, 1/step
- WF: 0~6
- Duplex/Triplex: On/ Off
- T/F Res: 0~4
- Auto Calc: On/ Off
- Auto Calc Cycle: 1~5
- Auto Calc Param: setting auto spectrum calculation results
- Trace Area: Above/ Below/ All

Smart 3D

- Reset: reset all, reset curve, reset orientation

- Accept VOI: on/off
- Render modes: Surface, Max, Min, X-ray
- Direction: D/U, U/D, L/R, R/L, F/B, B/F (D: down, U: up, L: left, R: right, F: front, B: back)
- Threshold: 0%-100%, 1%/step
- Opacity: 0%-100%, 5%/step
- Smooth: 0-10
- Brightness: 0%-100%, 2%/step
- Contrast: 0%-100%, 2%/step
- Tint: 0-25
- iClear: Off, 1-4
- Rotation control: X, Y, Z axis

TDI

Available on phased array transducer

- TVI/TEI
- Line density: L, M, H, UH
- Smooth: 0~4
- Persistence: 0~4
- Packet size: 0~3
- Dynamic range: 10~70, 5/step (TEI only)
- B/C Align: On/ Off
- WF: 0~7
- Priority: 0%~100%
- Baseline: -8~8, 1/step (TVI only)
- Invert: On/Off
- Map: TVV1-TVV10 (for TVI only)
  P0~P3, dP0~dP3 (for TEI only)
- Dual live: On/ Off
- PRF (kHz): 0.1 (2P2P)~13.7 (2P2P)
- Frame rate (Max.): 405 fps (2P2P)
- Flow velocities: (cm/s, probe dependent): 1 (2P2P)~ 262.9 (2P2P) (for TVI only)
- TVD
- Quick angle: 0°, -60°, 60°
- Angle: -89°~89°
- PRF (kHz): 0.7 (2P2P)~24 (2P2P)
- Flow velocities (cm/s, probe dependent): 10.8 (2P2P)~924 (2P2P)
- For details about TVM parameters, please refer to M mode and TVI mode imaging.

iScape

- Fit size
- Rotation: 0~355
- Actual size
- Review cine
- Ruler: On/ Off
- Tint map: Off, 1~25

Natural Touch Elastography

Only the 7L4P probe in SMP or MSK exam mode supports Natural Touch Elastography

- Single E: On/ Off
- Invert: On/ Off
- Opacity: 0~5
- Map: E0~E5
- Smooth: 0~5

Display Annotations

- Manufacturer logo
- Hospital name: up to 64 characters can be displayed
- Exam date: 3 types selectable, YY/MM/DD, MM/DD/YY, DD/MM/YY
- Exam time: 2 formats
- Acoustic output indices: MI, TIC, TIS, TIB
- Freeze icon
- Gender
- Age
- Animal: Dog/ Cat/ Equine/ Bovine/ Ovine /Other
- Animal ID: up to 64 characters can be displayed
- Other ID: up to 64 characters can be displayed
- Name: up to 64 characters can be displayed
- No.
- Host
- Probe model
- Current exam mode
- Accession#
- Operator: up to 64 characters can be displayed
- Menu
- Image
- Probe orientation mark
- Time line
- Coordinate axis, including depth, time, frequency
- TGC curve
- Focus
- Comment
- Body Mark
- Measure caliper
- Gray/color scale bar
- Thumbnail
- Help information
- Status icons

- Biopsy guideline
- Measure result window (up to 8 results can be displayed)
- Image parameters

Comments and Body Mark

Comment

Text comment

- Comment text for all exam modes
- Custom: add/delete/edit comment units in current menu.

Arrow

- Arrow size
- Arrow position
- Arrow orientation

Body Mark

Application package

- Body marks for all exam modes:
- Custom: import/delete body marks

Storage/ Connection

- 500G integrated hard disk
- External DVD-R/W
- 4 USB ports
- Image archive on hard disk, DVD, Medsight, network storage (iStorage) or temporary saving in cine memory
- Clipboard
- Thumbnail
- Single-frame image formats: BMP, JPG, TIFF, DCM, FRM (supports off-line analysis)
- Multi-frame images formats: AVI, DCM, CIN, (supports off-line analysis)
- Storage area:
  - Image area: 640*522
  - Standard area: 800×600
  - Full-screen: 1024×768
- iVision: Demo player
- Cine review: Auto, Manual (auto review segment can be set), supports linked cine review for 2D, M/D images.
- Cine memory capacity (Max.)
  - Clip length presettable: 1-60s
  - B mode: 6197 frames
  - M mode: 90.5 s
  - PW/CW: 84.8 s
  - Color: 1744 frames
- Max. frames in HDD (B mode)
  - BMP: 197887
  - FRM: 57847
- iStorage
- DICOM:
  - DICOM Basic

    Task management

    DICOM storage

    DICOM print

    DICOM storage commitment

    DICOM media storage (including DICOM DIR)
- MedSight
  - An interactive app that lets you transfer clinical images straight from Mindray Ultrasound system to a smart device, such as mobile phone or tablet PC.
  - Needs to be installed on mobile terminal
  - Transfer images or clips from system to mobile terminal through WiFi
  - Support Android/iOS powered system.

iStation™

Intelligent animal data management system

- Integrated search engine for animal data
- Detailed animal information view
- Intelligent data backup/ restore
- Animal data/ image sending
- animal data deleting
- Exam managing: create new exam, activate exam and continue exam
- Recycle Bin
- Task manager

Measure/Calc/Study

General

Application

B-Mode

Distance

Ellipse

Trace

Spline

Cross

- Angle
- Double Dist
- Trace Len
- Trace Len(Spline)
- Parallel
- B-Profile
- B-Hist(Ellipse)
- B-Hist(Trace)
- B-Hist(Spline)
- B-Hist(Rectangle)
- Depth
- Color Vel
- Color Vel Profile
- IMT
- ----------
- Volume
- Volume(Ellipse)
- Volume(E+Dist.)
- Ratio(D)
- Ratio(Ellipse)
- Ratio(Spline)
- Ratio(Cross)
- ----------
- Volume
  - Volume
  - Volume(Ellipse)
  - Volume(E+Dist.)
- Ratio(A)
  - Ratio(Trace)
  - Ratio(Ellipse)
  - Ratio(Spline)
  - Ratio(Cross)
- Volume Flow
  - Vas Area
  - TAMEAN
  - TAMAX

M-Mode
- HR
- Slope
- Distance
- Time
- Velocity

D-Mode
- PS/ED
- Vel
- HR
- Time
- Acceleration
- D Trace
- ----------
- Volume Flow
  - Vas Area
  - TAMEAN
  - TAMAX

Abdomen

B-Mode
- Liver
- Renal L
- Renal H
- Renal W
- Cortex
- Adrenal L
- Adrenal H
- Adrenal W
- CBD
- Portal V Diam
- CHD
- GB L
- GB H
- GB wall th
- Panc duct
- Panc head
- Panc body
- Panc tail
- Spleen
- Aorta Diam
- Aorta Bif
- Iliac Diam
- Pre-BL L
- Pre-BL H
- Pre-BL W
- Post-BL L
- Post-BL H
- Post-BL W
- Ureter
- ----------
- Renal Vol
- Pre-BL Vol
- Post-BL Vol
- Mictur.Vol

Kidney

Renal L

Renal H

Renal W

Cortex

Bladder

Pre-BL L

Pre-BL W

Pre-BL H

Post-BL L

Post-BL W

Post-BL H

Adrenal

Adrenal L

Adrenal W

Adrenal H

D-Mode

Ren A Org

Arcuate A

Segment A

Interlobar A

Renal A

M Renal A

Renal V

Aorta

Celiac Axis

SMA

C Hepatic A

Hepatic A

Splenic A

IVC

Portal V

M Portal V

Hepatic V

Lt Hepatic V

Rt Hepatic V

M Hepatic V

Splenic V

SMV

Bovine OB

B-Mode

Bovine CRL

Bovine TD

Bovine HD

Dog OB

B-Mode

Dog CRL

Dog GS

Dog HD

Dog BD

Equine OB

B-Mode

Equine GS-H

Equine GS-V

Feline OB

B-Mode

Feline BD

Feline HD

Ovine OB

B-Mode

Ovine CRL

Ovine BPD

Cardiology

B-Mode

LA Diam(2D)

LA Major

LA Minor

RA Major

RA Minor

LV Major

LV Minor

RV Major

RV Minor

LA Area

RA Area

LV Area(d)

LV Area(s)

RV Area(d)

RV Area(s)

LVIDd(2D)

LVIDs(2D)

LVIDd(Teich-2D)

LVIDs(Teich-2D)

LVIDd(Cube-2D)

LVIDs(Cube-2D)

LVIDd(Gibson-2D)

LVIDs(Gibson-2D)

RVDd(2D)

RVDs(2D)

LVPWd(2D)

LVPWs(2D)
RVAWd(2D)
RVAWs(2D)
IVSd(2D)
IVSs(2D)
Ao Diam(2D)
Ao Arch Diam(2D)
Ao Asc Diam(2D)
Ao Desc Diam(2D)
Ao Isthmus(2D)
Ao st junct(2D)
Ao Sinus Diam(2D)
Duct Art Diam
Pre Ductal
Post Ductal
ACS(2D)
LVOT Diam(2D)
AV Diam
AVA
PV Diam
LPA Diam(2D)
RPA Diam(2D)
MPA Diam(2D)
RVOT Diam(2D)
MV Diam
MVA
MCS(2D)
MV EPSS(2D)
TV Diam
TVA
IVC Diam(Insp)
IVC Diam(Expir)
SVC Diam(Insp)
SVC Diam(Expir)
LCA Diam
RCA Diam
VSD Diam
ASD Diam
PDA Diam
PFO Diam
PEd(2D)
PEs(2D)
Diastole(Teich-2D)
Systole(Teich-2D)
Diastole(Cube-2D)
Systole(Cube-2D)
Diastole(Gibson-2D)
Systole(Gibson-2D)
HR(Teich 2D)
HR(Cube 2D)
HR(Gibson 2D)

LA/Ao(2D)
Ao/LA(2D)

S-P Ellipse
    LVLd apical(SP Ellipse)
    LVAd apical(SP Ellipse)
    LVLs apical(SP Ellipse)
    LVAs apical(SP Ellipse)
    HR(SP Ellipse)
B-P Ellipse
    LVIDd(BP Ellipse)
    LVIDs(BP Ellipse)
    LVAd sax MV(BP Ellipse)
    LVAs sax MV(BP Ellipse)
    LVAd apical(BP Ellipse)
    LVAs apical(BP Ellipse)
    HR(BP Ellipse)
Bullet
    LVLd apical(Bullet)
    LVLs apical(Bullet)
    LVAd sax MV(Bullet)
    LVAs sax MV(Bullet)
    HR(Bullet)
Mod.Simpson
    LVLd apical(Simp)
    LVLs apical(Simp)
    LVAd sax MV(Simp)
    LVAs sax MV(Simp)
    LVAd sax PM(Simp)
    LVAs sax PM(Simp)
    HR(Mod Simp)
Simp SP(A2C)
    EDV(Simp SP-A2C)
    ESV(Simp SP-A2C)
    HR(Simp SP A2C)
Simp SP(A4C)
    EDV(Simp SP-A4C)
    ESV(Simp SP-A4C)
    HR(Simp SP A4C)
Simpson BP

- EDV(Simp BP-A2C)
- ESV(Simp BP-A2C)
- EDV(Simp BP-A4C)
- ESV(Simp BP-A4C)
- HR(Simp BP)

Cube(2D)
- LVIDd(Cube-2D)
- LVIDs(Cube-2D)
- HR(Cube 2D)

Teichholz(2D)
- LVIDd(Teich-2D)
- LVIDs(Teich-2D)
- HR(Teich 2D)

Gibson(2D)
- LVIDd(Gibson-2D)
- LVIDs(Gibson-2D)
- HR(Gibson 2D)

LA Vol(A-L)
- LA Diam(LA Vol A-L)
- LAA(A2C)
- LAA(A4C)

LA Vol(Simp)
- LA Vol(A2C)
- LA Vol(A4C)

RA Vol(Simp)
- RA Vol(A4C)

LV Mass(Cube-2D)
- IVSd(LV Mass Cube-2D)
- LVIDd(LV Mass Cube-2D)
- LVPWd(LV Mass Cube-2D)

LV Mass(T-E)
- LVAd sax Epi(LV Mass T-E)
- LVAd sax Endo(LV Mass T-E)
- a
- d

LV Mass(A-L)
- LVAd sax Epi(LV Mass A-L)
- LVAd sax Endo(LV Mass A-L)
- LVLd apical(LV Mass A-L)

MVA(VTI)
- LVOT Diam(MVA VTI)
- LVOT VTI(MVA VTI)
- MV VTI(MVA VTI)

AVA(VTI)
- LVOT Diam(AVA VTI)
- LVOT VTI(AVA VTI)
- AV VTI(AVA VTI)

Qp/Qs
- AV Diam(Qp/Qs)
- AV VTI(Qp/Qs)
- AV HR(Qp/Qs)
- PV Diam(Qp/Qs)
- PV VTI(Qp/Qs)
- PV HR(Qp/Qs)

PISA MR
- MR Rad
- MR Als Vel
- MR VTI(PISA MR)

PISA AR
- AR Rad
- AR Als Vel
- AR VTI(PISA AR)

PISA TR
- TR Rad
- TR Als Vel
- TR VTI(PISA TR)

PISA PR
- PR Rad
- PR Als Vel
- PR VTI(PISA PR)

M-Mode
- LA Diam(M)
- LVIDd(M)
- LVIDs(M)
- LVIDd(Teich-M)
- LVIDs(Teich-M)
- LVIDd(Cube-M)
- LVIDs(Cube-M)
- LVIDd(Gibson-M)
- LVIDs(Gibson-M)
- RVDd(M)
- RVDs(M)
- LVPWd(M)
- LVPWs(M)
- RVAWd(M)
- RVAWs(M)
- IVSd(M)
- IVSs(M)
- Ao Diam(M)
- Ao Arch Diam(M)
- Ao Asc Diam(M)

Ao Desc Diam(M)
Ao Isthmus(M)
Ao st junct(M)
Ao Sinus Diam(M)
LVOT Diam(M)
ACS(M)
LPA Diam(M)
RPA Diam(M)
MPA Diam(M)
RVOT Diam(M)
MV E Amp
MV A Amp
MV E-F Slope
MV D-E Slope
MV DE
MCS(M)
MV EPSS(M)
PEd(M)
PEs(M)
LVPEP(M)
LVET(M)
RVPEP(M)
RVET(M)
Diastole(Teich-M)
Systole(Teich-M)
Diastole(Cube-M)
Systole(Cube-M)
Diastole(Gibson-M)
Systole(Gibson-M)
HR(Teich M)
HR(Cube M)
HR(Gibson M)
HR

LA/Ao(M)
Ao/LA(M)

LV Tei Index(M)
    MV C-O dur(M)
    LVET(LV Tei Index-M)
Cube(M)
    LVIDd(Cube-M)
    LVIDs(Cube-M)
    HR(Cube M)
Teichholz(M)
    LVIDd(Teich-M)
    LVIDs(Teich-M)
    HR(Teich M)
Gibson(M)
    LVIDd(Gibson-M)
    LVIDs(Gibson-M)
    HR(Gibson M)
LV Mass(Cube-M)
    IVSd(LV Mass Cube-M)
    LVIDd(LV Mass Cube-M)
    LVPWd(LV Mass Cube-M)

D-Mode
    MV Vmax
    MV E Vel
    MV A Vel
    MV E VTI
    MV A VTI
    MV VTI
    MV AccT
    MV DecT
    IVRT
    IVCT
    MV E Dur
    MV A Dur
    LVOT Vmax
    LVOT VTI
    LVOT AccT
    AAo Vmax
    DAo Vmax
    AV Vmax
    AV VTI
    LVPEP(Doppler)
    LVET(Doppler)
    AV AccT
    AV DecT
    RVET(Doppler)
    RVPEP(Doppler)
    TV Vmax
    TV E Vel
    TV A Vel
    TV VTI
    TV AccT
    TV DecT
    TV A Dur
    RVOT Vmax
    RVOT VTI

PV Vmax
PV VTI
PV AccT
MPA Vmax
RPA Vmax
LPA Vmax
PVein S Vel
PVein D Vel
PVein A Vel
PVein A Dur
PVein S VTI
PVein D VTI
PVein DecT
IVC Vel(Insp)
IVC Vel(Expir)
SVC Vel(Insp)
SVC Vel(Expir)
MR Vmax
MR VTI
MS Vmax
dP/dt
AR Vmax
AR VTI
AR DecT
AR PHT
AR Ved
TR Vmax
TR Vmax(RVSP)
TR VTI
PR Vmax
PR VTI
PR PHT
PR Ved
RAP
VSD Vmax
ASD Vmax
PDA Vel(d)
PDA Vel(s)
Coarc Pre-Duct
Coarc Post-Duct
Ea(medial)
Aa(medial)
ARa(medial)
DRa(medial)
Sa(medial)
Ea(lateral)
Aa(lateral)
ARa(lateral)
DRa(lateral)
Sa(lateral)
HR
AV HR
MV HR
TV HR
PV HR
LVOT HR
RVOT HR

MV E/A
MVA(PHT)
TV E/A
TVA(PHT)

MVA(VTI)
    LVOT Diam(MVA VTI)
    LVOT VTI(MVA VTI)
    MV VTI(MVA VTI)
AVA(VTI)
    LVOT Diam(AVA VTI)
    LVOT VTI(AVA VTI)
    AV VTI(AVA VTI)
LV Tei Index(Doppler)
    MV C-O dur(Doppler)
    LVET(LV Tei Index-Doppler)
RVSP
    TR Vmax(RVSP)
    RAP
PAEDP
    PR Ved(PAEDP)
    RAP
RV Tei Index
    TV C-O dur
    RVET(RV Tei Index)
Qp/Qs
    AV Diam(Qp/Qs)
    AV VTI(Qp/Qs)
    AV HR(Qp/Qs)
    PV Diam(Qp/Qs)
    PV VTI(Qp/Qs)
    PV HR(Qp/Qs)
PISA MR
    MR Rad

- MR Als Vel
- MR VTI(PISA MR)
- PISA AR
- AR Rad
- AR Als Vel
- AR VTI(PISA AR)
- PISA TR
- TR Rad
- TR Als Vel
- TR VTI(PISA TR)
- PISA PR
- PR Rad
- PR Als Vel
- PR VTI(PISA PR)

Vascular

B-Mode
- CCA IMT
- Bulb IMT
- ICA IMT
- ECA IMT
- ----------
- Stenosis D
- Stenosis A
- ----------
- IMT
- CCA IMT
- Bulb IMT
- ICA IMT
- ECA IMT

D-Mode
- CCA
- Bulb
- ICA
- ECA
- Vert A
- Innom A
- Subclav A
- Axill A
- Brachial A
- Ulnar A
- Radial A
- Subclav V
- Axill V
- Cephalic V
- Basilic V
- Ulnar V
- Radial V
- C.Iliac A
- Ex.Iliac A
- CFA
- SFA
- Pop A
- TP Trunk A
- Peroneal A
- P.Tib A
- A.Tib A
- Dors.Ped A
- C.Iliac V
- Ex.Iliac V
- Femoral V
- Saph V
- Pop V
- TP Trunk V
- Sural V
- Soleal V
- Peroneal V
- P.Tib V
- A.Tib V
- ACA
- MCA
- PCA
- AComA
- PComA
- BA
- IIA
- DFA
- Ba V
- Brachial V
- IIV
- CFV
- SFV
- DFV
- SSV
- ASP
- BSP
- ----------
- ICA/CCA
- ----------
- ABI
- ASP
- BSP

Small Parts

B-Mode
- Thyroid L
- Thyroid H
- Thyroid W
- Isthmus H
- Testicular L
- Testicular H
- Testicular W
- Breast Mass1 d1
- Breast Mass1 d2
- Breast Mass1 d3
- Breast Mass2 d1
- Breast Mass2 d2
- Breast Mass2 d3
- Breast Mass3 d1
- Breast Mass3 d2
- Breast Mass3 d3
- Thyroid Mass1 d1
- Thyroid Mass1 d2
- Thyroid Mass1 d3
- Thyroid Mass2 d1
- Thyroid Mass2 d2
- Thyroid Mass2 d3
- Thyroid Mass3 d1
- Thyroid Mass3 d2
- Thyroid Mass3 d3
- ----------
- Thyroid Vol
- ----------
- Thyroid
  - Thyroid L
  - Thyroid W
  - Thyroid H
- Testis
  - Testicular L
  - Testicular W
  - Testicular H
- Breast Mass1
  - Breast Mass1 d1
  - Breast Mass1 d2
  - Breast Mass1 d3
- Breast Mass2
  - Breast Mass2 d1
  - Breast Mass2 d2
  - Breast Mass2 d3
- Breast Mass3
  - Breast Mass3 d1
  - Breast Mass3 d2
  - Breast Mass3 d3
- Thyroid Mass1
  - Thyroid Mass1 d1
  - Thyroid Mass1 d2
  - Thyroid Mass1 d3
- Thyroid Mass2
  - Thyroid Mass2 d1
  - Thyroid Mass2 d2
  - Thyroid Mass2 d3
- Thyroid Mass3
  - Thyroid Mass3 d1
  - Thyroid Mass3 d2
  - Thyroid Mass3 d3

D-Mode
- STA
- ITA

Urology

B-Mode
- Renal L
- Renal H
- Renal W
- Cortex
- Adrenal L
- Adrenal H
- Adrenal W
- Prostate L
- Prostate H
- Prostate W
- Seminal L
- Seminal H
- Seminal W
- Testicular L
- Testicular H
- Testicular W
- Ureter
- Pre-BL L
- Pre-BL H
- Pre-BL W
- Post-BL L
- Post-BL H
- Post-BL W
- Prostate Mass1 d1
- Prostate Mass1 d2
- Prostate Mass1 d3

Prostate Mass2 d1
Prostate Mass2 d2
Prostate Mass2 d3
Prostate Mass3 d1
Prostate Mass3 d2
Prostate Mass3 d3
Testicular Mass1 d1
Testicular Mass1 d2
Testicular Mass1 d3
Testicular Mass2 d1
Testicular Mass2 d2
Testicular Mass2 d3
Testicular Mass3 d1
Testicular Mass3 d2
Testicular Mass3 d3

Renal Vol
Prostate Vol
Testicular Vol
Pre-BL Vol
Post-BL Vol
Mictur.Vol

Kidney
    Renal L
    Renal H
    Renal W
    Cortex
Adrenal
    Adrenal L
    Adrenal W
    Adrenal H
Prostate
    Prostate W
    Prostate H
    Prostate L
Seminal Vesicle
    Seminal L
    Seminal W
    Seminal H
Testis
    Testicular L
    Testicular W
    Testicular H
Bladder
    Pre-BL L
    Pre-BL W
    Pre-BL H
    Post-BL L
    Post-BL W
    Post-BL H
  Prostate Mass1
    Prostate Mass1 d1
    Prostate Mass1 d2
    Prostate Mass1 d3
  Prostate Mass2
    Prostate Mass2 d1
    Prostate Mass2 d2
    Prostate Mass2 d3
  Prostate Mass3
    Prostate Mass3 d1
    Prostate Mass3 d2
    Prostate Mass3 d3
  Testicular Mass1
    Testicular Mass1 d1
    Testicular Mass1 d2
    Testicular Mass1 d3
  Testicular Mass2
    Testicular Mass2 d1
    Testicular Mass2 d2
    Testicular Mass2 d3
  Testicular Mass3
    Testicular Mass3 d1
    Testicular Mass3 d2
    Testicular Mass3 d3

Orthopedics

B-mode
  HIP
  HIP-Graf
  HIP(α)
  HIP(β)
  d/D

Gynecology

B-Mode
    UT L
    UT H
    UT W
    Cervix L
    Cervix H
    Cervix W
    Endo
    Ovary L

Ovary H
Ovary W
Follicle1 L
Follicle1 W
Follicle1 H
Follicle2 L
Follicle2 W
Follicle2 H
Follicle3 L
Follicle3 W
Follicle3 H
Follicle4 L
Follicle4 W
Follicle4 H
Follicle5 L
Follicle5 W
Follicle5 H
Follicle6 L
Follicle6 W
Follicle6 H
Follicle7 L
Follicle7 W
Follicle7 H
Follicle8 L
Follicle8 W
Follicle8 H
Follicle9 L
Follicle9 W
Follicle9 H
Follicle10 L
Follicle10 W
Follicle10 H
Follicle11 L
Follicle11 W
Follicle11 H
Follicle12 L
Follicle12 W
Follicle12 H
Follicle13 L
Follicle13 W
Follicle13 H
Follicle14 L
Follicle14 W
Follicle14 H
Follicle15 L
Follicle15 W
Follicle15 H
Follicle16 L
Follicle16 W
Follicle16 H

Ovary Vol
UT Vol
UT SUM
UT-L/CX-L
Follicle1
Follicle2
Follicle3
Follicle4
Follicle5
Follicle6
Follicle7
Follicle8
Follicle9
Follicle10
Follicle11
Follicle12
Follicle13
Follicle14
Follicle15
Follicle16

Uterus
    UT L
    UT H
    UT W
    Endo
Uterine Cervix
    Cervix L
    Cervix H
    Cervix W
Ovary
    Ovary L
    Ovary W
    Ovary H
Follicle1
    Follicle1 L
    Follicle1 W
    Follicle1 H
Follicle2
    Follicle2 L
    Follicle2 W

Follicle2 H
Follicle3
Follicle3 L
Follicle3 W
Follicle3 H
Follicle4
Follicle4 L
Follicle4 W
Follicle4 H
Follicle5
Follicle5 L
Follicle5 W
Follicle5 H
Follicle6
Follicle6 L
Follicle6 W
Follicle6 H
Follicle7
Follicle7 L
Follicle7 W
Follicle7 H
Follicle8
Follicle8 L
Follicle8 W
Follicle8 H
Follicle9
Follicle9 L
Follicle9 W
Follicle9 H
Follicle10
Follicle10 L
Follicle10 W
Follicle10 H
Follicle11
Follicle11 L
Follicle11 W
Follicle11 H
Follicle12
Follicle12 L
Follicle12 W
Follicle12 H
Follicle13
Follicle13 L
Follicle13 W
Follicle13 H
Follicle14
Follicle14 L
Follicle14 W
Follicle14 H
Follicle15
Follicle15 L
Follicle15 W
Follicle15 H
Follicle16
Follicle16 L
Follicle16 W
Follicle16 H

Auto Calculation

PS
ED
MD
PPG
TAMAX
Vol Flow(TAMAX)
TAMEAN
Vol Flow(TAMEAN)
DT
MPG
MMPG
VTI
AT
S/D
D/S
PI
RI
PV
HR

Diagnostic Report

- View/add images
- Data edit
- Print
- Save/ load comment
- export (to PDF/RTF file)
- View history report
- Obstetric analysis
- Fetal growth curve

Safety & Conformance

Quality Standards

- ISO 9001:2008
- ISO 13485:2003

Design Standards

- EN 60601-1 and IEC 60601-1
- EN 60601-1-2 and IEC 60601-1-2
- EN 60601-2-37 and IEC60601-2-37
- EN ISO 14971 and ISO 14971
- EN ISO10993-1 and ISO10993-1
- EN 62366 and IEC 62366
- EN 62304 and IEC 62304
- EN ISO 17664
- EN 1041
- EN 980
- IEC 60878

CE Declaration

Z6 Vet/ Z60 Vet system is fully in conformance with the EC Low Voltage Directive (2006/95/EC) and EC Directive of Electromagnetic Compatibility (2004/108/EC).

Not all features or specifications described in this document may be available in all probes and/or modes.