mindray

Datasheet

DP-30

Software version: 03.00.00 2018.07

Digital Ultrasonic Diagnostic Imaging System

System Description

The DP-30 is an ergonomically designed portable and ease-of-use machine for multi-specialty use like adults, pregnant women, pediatric patients and neonates.

Intended Use

- CE Region: It is intended for use in gynecology, obstetrics, abdominal, pediatric, small organ, cephalic, transcranial, musculo-skeletal, cardiac, vascular, urology, orthopedics and nerve exams.
- FDA Region: DP-30 Digital Ultrasonic Diagnostic Imaging System is applicable for adults, pregnant women, pediatric patients and neonates. It is intended for use in fetal, abdominal, pediatric, small organ(breast, thyroid, testes), neonatal cephalic, adult cephalic, trans-rectal, trans-vaginal, musculo-skeletal(conventional, superficial), cardiac(adult, pediatric), peripheral vascular and urology exams.

General Specification

Dimensions and Weight

- Depth: 167mm (6.57 inch)
- Width: 290mm (11.42 inch)
- Height: 350mm (13.78 inch)
- Net Weight: 5.6kg (dual-probe sockets, without battery or hard disk)

Electrical Power

Input power

- Voltage: 100-240V～
- Frequency: 50/60Hz
- Input current: 1.0- 0.5A

Battery

- Lithium-ion Battery Pack: 11.1V ⎓ , 4800mAh
- Charge time: < 3 hours (connected on AC power supply, with the system powered off)
- Endurance time: ≥ 100 min

Boot time

- Boot time: ⩽60s

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

Scanning Methods

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

Probe Model

35C50EA	Convex
35C20EA	Convex
65C15EA	Micro-Convex
65EC10EA	Endocavity Micro-Convex
75L38EA	Linear
75L53EA	Linear
10L24EA	Linear

Available Needle-guided Bracket for Probe:

35C50EA	NGB-001
75L38EA	NGB-002
35C20EA	NGB-003
65EC10EA	NGB-004
65C15EA	NGB-005

- 75L53EA NGB-007
- 10L24EA NGB-016

System Configuration

Standard Configuration

- Display
  - 12.1-inch LED, High-Resolution 1024 x 768
  - Contrast & Brightness adjustable
  - Screen Saver: Time presettable
  - Angle adjustable: 30°
- 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/HDD status
- Handle
- Dual-probe socket
- Phase Shift harmonic imaging
- iClear
- Trapezoid imaging
- Slant scanning for linear probes (2D Steer)
- iTouch™ (Auto Image Optimization)
- ExFOV Imaging (Extended FOV for Convex Probe)
- iStation™
- I/O Interfaces
  - Transducer port: 2
  - Power input port: 1 (Connect to the AC power supply)
  - USB port: 2
  - VGA OUT port: 1
  - Video OUT: 1
  - S-Video OUT: 1 (Separate video output)
  - Ethernet port: 1 (Connect to network)
  - Remote control port: 1
- Multi-language screen display and control panel overlay
- Application categories
  - Abdomen
  - Obstetrics
  - Gynecology
  - Cardiology
  - Small Parts
  - Urology
  - Vascular
  - Orthopedics
  - Emergency
  - Nerve
- Smart Installment Reminder

Accessories

- Operator’s manual
  - Basic Volume.
  - Advanced Volume.
  - Operation Note.
- Gel
- Power cord
  - 3-Flat-Pin Power Cord
  - EU Power Cord
  - US Power Cord
  - UK Power Cord
- Probe holder
- Gel holder
- Grounded Cable
- Video Printer Remote Cable

System Language

- Software display and keyboard input available:

Chinese/English/German/Spanish/French/Italian/Portuguese/Russian/Czech/Polish/Turkish/Finnish/Danish/Icelandic/Norwegian/Swedish

- Software display available only:

Indonesian

- Control panel overlay available:

Chinese/German/Spanish/French/Italian/Portuguese/Russian/Czech/Polish

- Operation manual available:

Chinese/English/German/Spanish/French/Italian/Portuguese/Russian

Options

- DICOM basic
  - Task management
  - DICOM storage
  - DICOM print
  - DICOM storage commitment
  - DICOM media storage (including DICOM DIR)
- DICOM Worklist

- Keys for option functions
- Battery Pack: Li-ion LI23I002A
- 500GB Hard disk (configured in factory)
- PW mode (only for CE region)
- Power mode (only for CE region)
- iScanHelper
- External USB DVD-RW
- Footswitch:
  - 971-SWNOM (2-pedal or 3-pedal)
  - FS-81-SP (1-pedal)
- Mobile trolley: UMT-110
  - Weight: 21kg
  - Width: 445mm
  - Depth: 535mm
  - Height: selective (not available after installed): 810mm, 870mm, 2 levels
- Carrying bag
- Dust-proof cover
- Probes
- Needle-guided brackets

Peripherals Supported

- Black and White Video Printer
  - MITSUBISHI P93W-Z Analog
  - SONY UP-X898MD Analog
  - MITSUBISHI P95DW-N Digital
- Color Video Printer
  - SONY UP-D25MD Digital
- Graph / text printer
  - HP Officejet Pro 8100
- USB removable storage device

Exam Mode

- Adult ABD
- ABD-Difficult
- Ped-ABD
- GYN
- OB1
- OB2/3
- Urology
- Prostate
- Vascular
- Thyroid
- Breast
- Testicle
- MSK
- Nerve
- Superficial
- Orthopedic
- Cardiac
- EM FAST

Imaging Mode

- B-Mode
  - Tissue Harmonic Imaging
  - Phase Shift Harmonic Imaging
- Slant scanning for linear probes (2D Steer)
- Trapezoid Imaging for Linear Probe
- ExFOV Imaging (Extended FOV for Convex Probe)
- Slant scanning for linear probes (PW independent)
- M - Mode
- PW – Mode (only for CE region)
- Power – Mode (only for CE region)
- Display Mode:
  - Dual live: B/M
  - Time line display: top/bottom (1:1, 2:1, 1:2, Full)
  - Single window
  - Dual-split: B/M, B/B, B/PW
  - Quad-split: 4B
  - B/C/D triplex mode

Imaging Features

- Multi-frequency probes for 2D imaging modes
- iClear™ (Speckle Suppression Imaging)
- iTouch™ (B): Auto Optimization
- TSI (Tissue Specific Imaging)
- iZoom™ (Full Screen View)
- Spot Zoom and Pan Zoom

B Mode

- Display Depth
  - Minimum: 0.9 cm
  - Maximum: 37.8 cm
- Frame rate (Max.):
  - B mode: 375 fps
- Adjustable focus number: 4
- Adjustable focus positions (Max.): 16
- Magnification factor：
  - Pan Zoom: 0.8-10
  - Spot Zoom: continuously adjustable
- iZoom: instant full screen view, two level.

- Dynamic range: 30~220
- Gain: 0~100dB
- TGC: 8
- Gray map: 1~8
- Tint map: off, 1~16
- ExFOV: on/off (Trapezoid imaging for linear probe)
- FOV: on/off, continuously adjustable
- IP: 1~8
- Persistence: 0~7
- R/L, U/D Flip
- Rotation: 0°, 90°, 180°, 270°
- Line Density: L, M, H, UH
- A.power: 7%~100%, 3%/step
- Smooth: 0~3
- TSI: General, Fat, Fluid, Muscle
- B Steer: -6°, 0°, 6°, linear transducer only
- H Scale: on/off
- Lithotrity: on/off
- Gray Rejection: 0~5
- γ: 0~3
- Curve: adjustable
- Gray Invert: on/off
- Auto Merge: on/off, linear probe, Dual display mode

M Mode

- Gain: 0~100
- Speed: 1~6
- Edge Enhance: 0~14
- M Soften: 0~14

PW Mode

- Display formats: V1:2,V2:1,V1:1,FULL
- SV: 0.5-20 mm
- SVD: 10%-100%
- Baseline: -4-4, 1/step
- PW Steer: max. 6 degrees (linear transducer)
- Volume: 0-100%, 2%/step
- PW PRF: 0.7 kHz to 24 kHz
- Gain: 0-100, 2/step
- Dynamic range: 24-72, 2/step
- Speed: 6 steps, 1/step
- Wall filter: 7 steps, 1/step
- Invert: on/off
- Angle: -89-89 degrees, 1/step
- Quick angle: -60, 0, 60 degrees
- Gray map: 8 types
- Tint map: Off; 16 types
- Time/frequency resolution: 0-4

Power Mode

- Dynamic Range: 10-70
- Map: P0-P3, dP0-dP3

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
- 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
- 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
- TGC curve
- Focus
- Comment
- Body Mark
- Measure caliper
- Gray 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

- 500GB integrated hard disk (Optional)
- 8GB SSD standard storage space
- External DVD-R/W (Optional)
- 2 USB ports
- Image archive on hard disk, USB storage device, DVD, iStorage (Advanced Network Storage) and temporary saving in cine memory
- Clipboard
- Thumbnail
- Single-frame image formats: BMP, JPG, DCM, FRM(supports off-line analysis)
- Multi-frame images formats: AVI, DCM, CIN, (supports off-line analysis)
- Storage area:
  - Image area: 640×480
  - 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 images.
- Cine memory capacity (Max.)
  - Clip length presettable: 1-60s
  - B mode: 11959 frames
  - M mode: 110.0 s
- Max. frames in HDD (M mode, 35C50EA)
  - 500G SATA hard disk not configured:
    FRM: 1063
    BMP: 1137
  - 500G SATA hard disk configured:
    FRM: 148890
    BMP: 223004
- iStorage (Advanced Network Storage)
- DICOM:
  - DICOM Basic
    Task management
    DICOM storage
    DICOM print
    DICOM storage commitment
    DICOM media storage (including DICOM DIR)
  - DICOM Worklist

iStation™

Intelligent patient data management system

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

Measure/Calc/Study

General

- B-Mode measurement
  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

- B-mode calculation
  - Volume
  - Volume(Ellipse)
  - Volume(E+Dist.)
  - Ratio(D)
  - Ratio(Ellipse)
  - Ratio(Spline)
  - Ratio(Cross)
- B-mode study
  - 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 measurement
  - HR
  - Slope
  - Distance
  - Time
  - Velocity
- Doppler-Mode
  - PS/ED
  - Vel
  - HR
  - Time
  - Acceleration
  - D Trace
  - Volume Flow
    - Vas Area
    - TAMEAN
    - TAMAX

Application

Abdomen

- B-Mode measurement
  - 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
- B-Mode calculation
  - Renal Vol
  - Pre-BL Vol
  - Post-BL Vol
  - Mictur.Vol
- B-Mode study
  - 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

Obstetrics

- B-Mode measurement
  - GS
  - YS
  - CRL
  - NT
  - BPD
  - OFD
  - HC
  - AC
  - FL
  - TAD
  - APAD
  - TCD
  - CM
  - LVW
  - HW
  - OOD
  - IOD
  - HUM
  - Ulna
  - RAD
  - Tibia
  - FIB
  - CLAV
  - Vertebrae
  - MP
  - Foot
  - Ear
  - APTD
  - TTD
  - FTA
  - THD
  - HrtC
  - TC
  - Umb VD
  - F-kidney
  - Mat Kidney
  - Cervix L
  - AF
  - NF
  - Orbit
  - PL Thickness
  - Sac Diam1
  - Sac Diam2
  - Sac Diam3
  - AF1
  - AF2
  - AF3
  - AF4
  - LVIDd
  - LVIDs
  - LV Diam
  - LA Diam
  - RVIDd
  - RVIDs
  - RV Diam
  - RA Diam
  - IVSd
  - IVSs
  - IVS
  - LV Area
  - LA Area
  - RV Area
  - RA Area
  - Ao Diam
  - MPA Diam
  - LVOT Diam
  - RVOT Diam
  - Facial Angle
  - HrtA
- B-Mode calculation
  - Mean Sac Diam
  - AFI
  - EFW
  - EFW2
  - HC/AC(Campbell)
  - FL/AC
  - FL/BPD
  - AXT
  - CI
  - FL/HC(Hadlock)
  - HC(c)
  - HrtC/TC
  - TCD/AC
  - LVW/HW
  - LVD/RVD
  - LAD/RAD
  - AoD/MPAD
  - LAD/AoD

- B-Mode study
  - AFI
    - AF1
    - AF2
    - AF3
    - AF4
- M-Mode measurement
  - FHR
  - LVIDd
  - LVIDs
  - RVIDd
  - RVIDs
  - IVSd
  - IVSs

Cardiology

- B-Mode measurement
  - 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)

- B-Mode calculation
  - LA/Ao(2D)
  - Ao/LA(2D)
- B-Mode study
  - 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)
    - Diastole(Cube-2D)
    - Systole(Cube-2D)
    - IVSd(Cube-2D)
    - LVIDd(Cube-2D)
    - LVPWd(Cube-2D)
    - IVSs(Cube-2D)
    - LVIDs(Cube-2D)
    - LVPWs(Cube-2D)
    - HR(Cube 2D)
  - Teichholz(2D)
    - Diastole(Teich-2D)
    - Systole(Teich-2D)
    - IVSd(Teich-2D)
    - LVIDd(Teich-2D)
    - LVPWd(Teich-2D)
    - IVSs(Teich-2D)
    - LVIDs(Teich-2D)
    - LVPWs(Teich-2D)
    - HR(Teich 2D)
  - Gibson(2D)
    - Diastole(Gibson-2D)
    - Systole(Gibson-2D)
    - IVSd(Gibson-2D)
    - LVIDd(Gibson-2D)
    - LVPWd(Gibson-2D)
    - IVSs(Gibson-2D)
    - LVIDs(Gibson-2D)
    - LVPWs(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)
- M-Mode measurement
    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
- M-Mode calculation
    LA/Ao(M)
    Ao/LA(M)
- M-Mode study
    LV Tei Index(M)
        MV C-O dur(M)
        LVET(LV Tei Index-M)
    Cube(M)
        Diastole(Cube-M)
        Systole(Cube-M)
        IVSd(Cube-M)
        LVIDd(Cube-M)
        LVPWd(Cube-M)
        IVSs(Cube-M)
        LVIDs(Cube-M)
        LVPWs(Cube-M)
        HR(Cube M)
    Teichholz(M)
        Diastole(Teich-M)
        Systole(Teich-M)
        IVSd(Teich-M)
        LVIDd(Teich-M)
        LVPWd(Teich-M)
        IVSs(Teich-M)
        LVIDs(Teich-M)
        LVPWs(Teich-M)
        HR(Teich M)
    Gibson(M)
        Diastole(Gibson-M)
        Systole(Gibson-M)
        IVSd(Gibson-M)

LVIDd(Gibson-M)
LVPWd(Gibson-M)
IVSs(Gibson-M)
LVIDs(Gibson-M)
LVPWs(Gibson-M)
HR(Gibson M)
LV Mass(Cube-M)
IVSd(LV Mass Cube-M)
LVIDd(LV Mass Cube-M)
LVPWd(LV Mass Cube-M)

Vascular

- B-Mode calculation

Stenosis D
Stenosis A

Gynecology

- B-Mode measurement

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

- B-Mode calculation

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

- B-Mode study
  - 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

Urology

- B-Mode measurement
  - 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

- B-Mode calculation
  - Renal Vol
  - Prostate Vol
  - Testicular Vol
  - Pre-BL Vol
  - Post-BL Vol
  - Mictur.Vol
- B-Mode study
  - 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

Small Parts

- B-Mode measurement
  - 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
- B-Mode calculation
  - Thyroid Vol
- B-Mode study
  - 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

Orthopedics

- B-Mode measurement
  - HIP
  - HIP-Graf
  - d/D

EM (Emergency)

- B-Mode measurement
  - Renal L
  - Renal H
  - Renal W
  - CBD
  - Portal V Diam
  - CHD
  - GB wall th
  - Aorta Diam
  - Aorta Bif
  - Ureter
  - Pre-BL L
  - Pre-BL H
  - Pre-BL W
  - Post-BL L
  - Post-BL H
  - Post-BL W
  - GS
  - YS
  - CRL
  - BPD
  - UT L
  - UT H
  - UT W

Endo
Ovary L
Ovary H
Ovary W

- B-Mode calculation
  Renal Vol
  Pre-BL Vol
  Post-BL Vol
  Mictur.Vol
  Ovary Vol
  UT Vol
  UT SUM
- B-Mode study
  Uterus
    UT L
    UT H
    UT W
    Endo
  Ovary
    Ovary L
    Ovary W
    Ovary H
  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
- M-Mode measurement
  FHR

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
- Import
- 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 15223-1
- IEC 60878

CE Declaration

DP-30 system is fully in conformance with the Council Directive 93/42/EEC Concerning Medical Devices, as amended by 2007/47/EC. The number adjacent to the CE marking (0123) is the number of the EU-notified body that certified meeting the requirements of Annex II of the Directive.

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