



Apogee 2100 series

—— *Digital Mobile Color*

Doppler System

Appearance

- Ergonomic appearance
- 15-inch LCD monitor
 - Can be flipped up to 35°
- Visual Angle:
 - Left and right side: 170°
 - Up and down: 170°
 - Resolution : 1024 × 768
- Backlit keyboard, 8 TGC
- Transparent keyboard membrane for minor languages
- Lithium battery, detachable
 - Endurance time: more than 50 min
- Two active probe connectors
- Two probe holders

- Electronic transrectal probe
- Electronic phased array probe
- 4D convex probe

Probe Mode

- C3LN convex probe
- C3IN convex probe
- C6LN micro-convex probe
- L8LN linear probe
- L10LN linear probe
- P3FN phased array probe
- V6LN trans vaginal probe
- U5LN transrectal probe
- C5LN 4D convex probe

Probe

Transducer Types

- Electronic convex probe
- Electronic micro-convex probe
- Electronic linear probe
- Electronic trans vaginal probe

Technology

Applications

- Abdomen, Urology, Gynecology,
- Obstetrics (1st Trimester, 2nd and 3rd Trimesters), Fetal echo, Multifetation
- Abdomen (PEN), Urology (PEN)
- Thyroid, Breast, Testes, Peripheral

- vascular, Orthopedics, Podiatry, Superficial, Small part (PEN), Musculoskeletal Neurology
- Carotid, Vascular (PEN)
- Cardiology, Cardiology (PEN),
- Paediatrics Cardiac

Highlight

- Auto-Fit: Automatic Optimization
- Nanoview : Speckled Reduction
- Trapezoidal/ Extend Imaging
- Tissue Harmonic imaging
- Edit the exam type and save the user-defined items
- MFI (Inversion THI)
- XBeam : Compound Imaging
- Panoscope : Panoramic Imaging
- Auto IMT
- Auto Volume
- Semi-Auto EF
- Color Doppler/CPA/DPA and Triplex (Optional for B/W versions)
- VS Flow
- Pulse Wave Doppler
- Duplex
- HPRF
- CW(Optional)
- Anatomic M mode (360°,3lines)
- Color M mode (Optional)
- TDI (Optional)
- ECG (Optional)
- TEI index
- Free hand 3D
- 4D Lite
- 4D Pro (Optional)
- Elastography (Optional)
- SonoAir : transmit images to iPad/iPhone or the wireless Printer (Optional)
- Smarchive
- DICOM 3.0 (Optional)

Display mode

- B, 2B, 4B mode
- M, B/M mode
- B/Color, B/CPA, B/DPI mode
- PW, B/PW, B/C/PW mode
- Trapezoidal Imaging
- Tissue Harmonic Imaging
- B/C real time
- 3D, 4D mode
- E, B/E mode

Zoom

- HD Zoom:×1.0~×9.0
- Full-View Zoom:×1.0~×8.0
- Full Screen Zoom-The image area fills into whole screen

Focus

- Continuous dynamic focus
- Dynamic apodization
- 1~8 selectable transmit focus
- Acoustic lens focus

Memory

- B-mode cine avi record (60 min)
- Cine-memory
- B-mode (max.2000 frames)
- M-mode (650 s)
- PW-mode (650 s)
- CW-mode (320 s)
- Hard disk 500 GB

Imaging Processing

2D mode

- 8-step TGC slide pots
- Gain: 0~100dB
- Depth: 1.6~30.8 cm
- Frequency: 5 steps
- Dynamic range adjustable: 30~180dB
- Edge enhancement: 0~3

- Smooth: 0~3
- Nanoview: 0~6
- Persistence: 0~7
- Chroma: 0~8
- Grayscale: 0~23
- Power: $-\infty \sim 0$ dB, 0~100%
- Scan angle: $10^\circ \sim 157^\circ$
- B steer: $-20^\circ \sim +20^\circ$
- B rotation: $0^\circ \sim 270^\circ$
- Line density: 2 steps
- Inversion: left/right, up/down, rotate
- Chroma: 0~8
- PRFd: 0.25~25KHz
- Basic line: 31 steps
- Wall filter: 12.5 KHz,Max,50 steps
- Angle: $-80^\circ \sim +80^\circ$
- Sampling volume: 0.5~40.0mm
- Volume:0~100%
- D Speed: 1~6
- Smooth: 0~3
- Power: $-\infty$ dB ~ 0 dB, 0~100%
- Steer: $-20^\circ \sim +20^\circ$

M mode

- Gain:0~100dB
- Sweep speed: 4 steps
- Grayscale: 0~23
- Chroma: 0~8

Color mode (Optional for B/W versions)

- Gain control: 0~100dB
- PRF: 0.25KHz~12.5KHz
- Wall filter: 3KHz, 50 steps(6.25KHz max in cardiac probe)
- Median Filter: 0~3
- Threshold: 0~10
- Color Map: 0~10
- Smooth: -3~3
- Color persistence: 0~7
- Line density: 2 steps
- Velocity: 0.1cm/s ~ 298.4cm/s
- Color frequency: 3 steps
- Power: 0~100%, $-\infty$ dB ~ 0 dB
- Baseline: 17 steps
- Steer: $-20^\circ \sim +20^\circ$
- Priority: 0~255,85 steps
- Sampling volume: 1~128

PW mode

- Gain: 0~100dB
- D map: 0~23
- Frequency: 3 steps

4D Lite mode

- 4D map: 31 steps
- Color: 0~4
- Rotate angle: $0^\circ \sim 270^\circ$
- Threshold: 0~100
- Smooth: 0~3
- Brightness: 0~10
- Opacity:0~255
- Render Rate: Low, Mid, High
- Scan Rate: Low, Mid, High
- Angle:50%~100%

4D Pro mode (Optional)

- Zoom: 0.2~2.5
- Chroma: 0~5
- Smooth: 0~5
- Scan Rate:Low,Mid,High
- Blend:0~255
- nSlice:
 - Slices: 3~39
 - Space: 0.5~20mm
- Q Cut
- Any Cut

ECG mode(Optional)

- Gain: 1~8
- Position: 1~10
- Interval: ON/OFF
- ESP:0~3

- Color:1~4
- Hide: ON/OFF

Measurement & Calculation

Measurement

2D mode (General)

- Distance
- Trace Length
- Ellipse (area)
- Trace (area)
- Angle (general)
- Angle (cross)
- Auto IMT (intima-media thickness)
- Histogram

PW mode

- HR (heart rate)
- Velocity
 - PSC (peak systolic velocity)
 - EDV (end diastolic velocity)
 - S/D (systolic/diastolic)
 - RI (resistance index)
 - PG (pressure)
- ACC (acceleration)
- Time
- Manual Trace
 - PSC (peak systolic velocity)
 - EDV (end diastolic velocity)
 - MN (median)
 - ACC (acceleration)
 - S/D (systolic/diastolic)
 - RI (resistance index)
 - PI (pulsatility index)
 - HR (heart rate)
 - PG (pressure)
- Auto Trace
 - PSC (peak systolic velocity)
 - EDV (end diastolic velocity)

- MN (median)
- ACC (acceleration)
- S/D (systolic/diastolic)
- RI (resistance index)
- PI (pulsatility index)
- HR (heart rate)
- PG (pressure)

- Range Trace
 - PSC (peak systolic velocity)
 - EDV (end diastolic velocity)
 - MN (median)
 - ACC (acceleration)
 - S/D (systolic/diastolic)
 - RI (resistance index)
 - PI (pulsatility index)
 - HR (heart rate)
 - PG (pressure)

Calculation

Abdomen

Urology

Gynecology

Obstetrics (1st Trimester)

Obstetrics (2nd & 3rd Trimesters)

Fetal echo

Thyroid

Breast

Testes

Neonate

Peripheral vascular

Orthopedics

Carotid

Cardiology

Physical Features

Connectivity

- Video out port
- S-Video out port
- Audio in port
- Audio out port
- MIC
- VGA out port
- 2 USB port
- Printer control port
- AC power input port
- HDMI digital port
- Network interface
- Foot SW
- ECG port
- Adapter port

Dimension

- Gross dimension:
 - 630 mm (H) X 330 mm (W) X 510 mm (D) (2 probes)
 - 630 mm (H) X 420 mm (W) X 510 mm (D) (4 probes)
- Net dimension:
 - 390 mm (H) X 360mm (W) X 145mm (D) (without probe holder)
 - 390 mm (H) X 420mm (W) X 171mm (D) (with probe holder)

Weight

- Gross weight
 - 14.5kg (2 probes)
 - 18kg (4 probes)

- Net weight
 - 7.9kg (without battery)
 - 0.56kg(single battery)

Power Requirements

- Voltage: AC 100V to 240V±10%
- Frequency: 50Hz±1Hz; 60Hz±1Hz
- Rated Power: 220VA

Operation Conditions

- Ambient temperature: 0°C to +40°C
- Relative humidity: 38% to 85%
- Atmospheric Pressure: 700hPa to 1060hPa

Stored Conditions

- Ambient temperature: -20°C to +60°C
- Relative humidity: 15% to 93%
- Atmospheric Pressure: 500hPa ~ 1060hPa

Software & Accessories

Standard Accessories

- Power Cable
- Operation Manual
- Printer control cable
- S-Video cable
- Wireless network antenna(if purchase WiFi function)
- BNC/RCA cable
- Dust-proof cover
- Probe holder
- Recovery system USB
- Adapter

Optional software language

- Chinese/English

Optional Accessories

- B/W or color Video printer
- LaserJet or inkjet printer
- Biopsy guide for convex or linear probe
- Biopsy guide for trans vaginal or transrectal probe
- Foot switch(JT-3/JT-2)
- Trolley (CR-30A/CR-30B)
- ECG cable
- Printer tray(TP-B001)
- Plastic trolley case(BXX-02)

Applied Standards

Quality Standards

- ISO 9001:2008
- ISO 13485:2003

Conformance Standards

- UL 60601-1
- EN 60601-1 and IEC 60601-1
- EN 60601-1-1 and IEC 60601-1-1
- EN 60601-1-2 and IEC 60601-1-2

- EN 60601-1-4 and IEC 60601-1-4
- EN 60601-1-6 and IEC 60601-1-6
- EN 60601-2-37 and IEC 60601-2-37
- EN 62304 and IEC 62304

CE Declaration

The Certification Body of TÜV SÜD Product Service GmbH declares that the aforementioned manufacturer has implemented a quality assurance system for design, manufacture and final inspection of the respective products / product categories according to Annex II section 3 of the Directive 93/42/EEC on Medical Devices.