

The High-Performance Portable Color Doppler System

Apogee 2300 Data Sheet

The portable color Doppler Apogee 2300 is endowed with SIUI's core technology to conduct excellent image performance with surprising processing speed. Ergonomic compact design not only employs simple and convenient operation workflow, but also boasts high extensibility. Apogee2300's high performance guarantees all-found capability for general purpose.

Highlights

- *Nanoview*
- *MFI*
- *Xbeam*
- *Panoscope*
- *VS Flow*
- *Auto EF*
- *Auto Strain*
- *Stress Echo*
- *Anatomic M mode*
- *Color M mode*
- *TDI*
- *ECG*
- *4D Pro*
- *Lumi 4D*
- *Auto OB*
- *Elastography*
- *Needle Enhancement*
- *S-Helper*
- *SIUI MAI Remote Service*



General Specification

Dimension

- Gross dimension
 - H 630mm * W 330mm * D 510mm (2 probe)
 - H 630mm * W 420mm * D 510mm (4 probe)
 - H 640mm * W 640mm * D 510mm (2 probe & BXX-05 travelling bag)
 - H 670mm * W 500mm * D 320mm (BXX-02 travelling case)
- Net dimension
 - H 356mm * W 145mm * D 390mm (without cupule)
 - H 420mm * W 170mm * D 390mm (include cupule)

Weight

- Gross weight
 - 14.5kg (2 probe)
 - 18kg (4 probe)
 - 25.5kg (BXX-02 travelling case)
- Net weight
 - 8kg (without battery)
 - 0.6kg (single battery)

Power Requirements

- Voltage: 100~240V
- Frequency: 50Hz/60Hz
- Rated Power: 220VA

Operation Conditions

- Ambient temperature: 0°C to +40°C
- Relative humidity: 30% 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

Connectivity

- Video out port
- S-Video out port
- VGA out port
- 2 USB port
- Printer control port
- HDMI digital port

- Foot Switch port
- Network port
- ECG port
- Adapter port
- And others

Appearance

- Ergonomic appearance
- 15-inch high resolution 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 45 min
- Two active probe connectors
- Two probe holders
- Hard disk 500 GB
- And others

System overview

Applications

- Abdomen
- Urology
- Gynecology
- Obstetrics (1st Trimester, 2nd and 3rd Trimesters)
- Fetal echo
- Multifetation Gest
- Peripheral Nerve
- Thyroid
- Breast
- Testes
- Peripheral Vein
- Peripheral Arteries
- MSK
- Podiatry
- Superficial
- Carotid
- Cardiology
- Paediatrics Cardiac
- Neurology (TCD)

- Endocrine
- And others

Transducer Types

- Convex probe
- Micro-convex probe
- Linear probe
- Trans vaginal probe
- Phased array probe
- Trans rectal probe
- Biplane probe
- TEE probe
- 4D convex probe
- And others

Standard Features

- Auto-Fit
- Nanoview
- Trapezoidal/ Extend Imaging
- Tissue Harmonic Imaging
- Exam Type Customization
- Bodymark Customization
- MFI (Inversion THI)
- XBeam
- Auto IMT
- Auto Volume
- Semi-Auto EF
- CFM/CPA/DPA
- Pulse Wave Doppler
- Duplex / Triplex
- HPRF
- Panoscope
- VS Flow
- Anatomic M mode
- Free hand 3D
- Horizontal Scale
- 4D Pro
- Smarchive
- Auto PW trace and calculate
- Semi auto PW trace and calculate
- Image Auto-Fit
- Tissue Specificity Imaging

Optional Features

- TDI
- Color M mode
- CW

- Elastography
- ECG
- Auto EF
- Auto Strain
- Lumi 4D
- Auto OB
- SonoAir
- DICOM 3.0
- Needle Enhancement
- Stressecho
- SIUI MAI: Remote online
Demonstration/Training/Course/Service
- S-Helper
- And others

Standard Accessories

- Power Cable
- Adapter
- Operation Manual
- Printer control cable
- S-Video cable
- BNC/RCA cable
- Dust-proof cover
- Recovery system USB
- Probe holder

Optional Accessories

- ECG cable
- Camera
- Wireless adapter
- 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
- Travelling Case
- Travelling Bag
- Trolley
- Printer tray
- Probe switcher
- Special probe holder for Small Size Probe in trolley
- And others

Display Mode

- B, 2B, 4B mode
- M, B+M mode
- B+C+M

- B+C mode
- B+CPA, B+PDI mode
- B+VS Flow mode
- B+PW mode
- B+CFM+PW, B+VS+PW
- B+CPA+PW, B+DPA+PW
- B+CW mode
- B+CFM+CW
- B+E mode
- B+TDI, B+TDI+PW
- Split B/Color real time mode
- 3D, 4D mode
- And others

System Parameters

Zoom

- HD Zoom(with sample box)
- Full-View Zoom
- Full Screen Zoom
- Realtime Zoom mix times: $\geq x60.0$

Focus

- Continuous dynamic focus
- 1~8 selectable transmit focus
- Focus pos
- And others

Memory

- 2D avi record (60 min)
- 2D cinelooop record (max.2000 frames)
- M-mode
- PW-mode
- CW-mode
- 4D-mode
- And others

2D Imaging Processing

- TGC slide pots
- Gain
- Depth
- Frequency
- Dynamic range adjustable
- Enhancement
- Smooth
- Nanoview

- Persistence
- Zoom
- Chroma
- Grayscale
- Power
- Scan angle
- B steer
- B rotation
- Line density
- Inversion
- Focus number
- XBeam:
- And others

M Mode Imaging Processing

- Gain
- Sweep speed
- Maps
- Chroma
- Display layout
- AMM-angle
- AMM-line
- And others

Color/CPA Mode Imaging Processing

- Gain control
- Pulse repetition frequency
- Wall filter
- C Priority
- C Gate
- Median Filter
- Threshold
- Color Map
- Smooth
- Color persistence
- Line density
- Color enhancement
- Color frequency:
- Power
- Baseline
- Steer
- And others

PW Mode Imaging Processing

- Gain
- D map
- Frequency

- Chroma
- PRFd
- Baseline
- Wall filter
- Angle
- Sampling volume
- Volume
- D Speed
- Smooth
- Power
- Steer
- Display layout
- And others

CW Mode Imaging Processing

- Gain
- Map
- Speed
- Volume
- Power
- Smooth
- Chroma
- Wall filter
- Angle
- Scale:
- Velocity
- Display layout
- And others

TDI Mode Imaging Processing

- C Gain
- C PER
- C Freq
- PRFc
- Wall filter
- Baseline
- C Map
- Thred
- C Prior
- C PWR
- C SMO
- C Gate
- M Filter
- C LD
- C Speed
- C ENH
- And others

ECG Mode Imaging Processing

- Gain
- Position
- Interval
- ESP
- Color
- Hide
- Heart rate display
- And others

4D Pro Image Processing

- Zoom
- Color
- Smooth
- Scan Rate
- Opacity Map
- Opacity Pos
- nSlice:
 - Planes
 - Space
- Q Cut
- Any Cut
- And others

Lumi 4D Imaging Processing

- Rotate angle
- Light source angle: Spatial free position
- Light source quick angle
- Color
- Zoom
- Threshold
- X/Y/Z
- Smooth
- Gloss
- Opacity Map
- And others

Elastography Imaging processing

- Dual live with E and B mode
- Compressure pilot lamp
- Compressure guide with motion curves
- Clarity
- Smooth
- Map
- Persistence
- Dynamic range

- Frequency
- Gain
- And others

Needle Guide

- Guide position: L/R, Rotation, translation
- Guide line: Intensity control
- Guide line display: one/dual lines
- Angle adjust
- Needle enhancement
- And others

Stress Echo

- Analysis section
- Analysis and score number of LV segments
- Protocol
- Protocol template edit available
- Rest and peak rawdata storage and repick available
- Peak status consecutive storage available
- Report analysis available
- Bull's-eye analysis and score available
- And others

Auto EF

- Imaging processing: Auto tissue speckle tracking
- Automatic calculate parameter
- Analysis section
- Heart cycle selection available
- Speckle tracking sample line edit correction
- Cineloop review with analysis chart available
- Image storage available
- Report analysis available
- And others

Auto Strain

- Imaging processing: Auto tissue speckle tracking
- Analysis the segments function of left ventricle
- Analysis and score number of segments
- Analysis section
- Bull's-eye analysis available
- Heart cycle selection available
- Speckle tracking sample line edit correction
- Cineloop review with analysis chart available
- Image storage available
- Report analysis available
- And others

SIUI MAI Remote Value-Added Service

- Ultrasound device SIUI MAI platform support
- Reomte service support: Demonstration/Training/ Course/After sales service
- Realtime live broadcast
- And others

General Measurement

- B Mode
- M Mode
- Color Mode
- PW/CW Mode

Calculation Package

- Abdomen
- Urology
- Gynecology
- Obstetrics (1st Trimester)
- Obstetrics (2nd and 3rd Trimesters)
- Carotid
- Peripheral vascular
- Thyroid
- Eye Ball
- Testes
- Neonatal
- Pediatrics (Orthopedics)
- Cardiology
- TCD(Transcranial)
- Emergency
- Peripheral Nerve
- Endocrine
- Pelvic Floor

Identification

Quality Standards

- ISO 9001:2015
- ISO 13485:2016

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 devices / device categories in accordance with MDD Annex II.

FDA Clearance

- PMN/510(k)