



Apogee 3300

— *Digital Trolley Color
Doppler System*

Appearance

- Ergonomic appearance
- Swivel keyboard and monitor
- High resolution color monitor
- 18.5-inch LCD monitor
- 8.4-inch touch screen
- Visual Angle:
 - Left and right side: 178°
 - Up and down side: 178°
 - Resolution : 1366 × 768
- Backlit keyboard, 8 TGC
- Four probe connectors
- Six probe holders

Probe

Transducer Types

- Electronic convex probe
- Electronic linear probe

- Electronic trans vaginal probe
- Electronic trans rectal probe
- Electronic biplane probe
- 4D convex probe
- 4D trans vaginal probe

Probe Mode

- C3L60C convex probe
- C3I20C convex probe
- C3L40C convex probe
- V6L11C trans vaginal probe
- L8L38C linear probe
- L8L50C linear probe
- P3F14C phased array probe
- C5L40C 4D convex probe
- C3I20C 4D trans vaginal probe
- U5L50C biplane 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 (B and PW mode)
- Nanoview : Speckled Reduction
- Trapezoidal Imaging (linear probe)
- Tissue Harmonic imaging (3 frequency)
- Zoom : Spot zoom and Pan zoom
- Edit the exam type and save the user-defined items
- Color Doppler and Color Power Doppler
- Pulse Wave Doppler
- XBeam : Compound Imaging (Optional)
- Panoscope : Panoramic Imaging (Optional)
- Anatomic M mode(Optional)
- Elastography (Optional)
- Free hand 3D
- 4D Lite(Optional)
- CW function(Optional)
- SonoAir : transmit images to iPad/iPhone or the wireless Printer (Optional)
- DICOM 3.0 (Optional)
- ECG(Optional)
- Smarchive

Display mode

- B, 2B, 4B mode
- M, B/M mode
- Color flow mode
- Pulse Wave Doppler
- B/CFM, B/PDI mode
- B/PW mode
- B/CFM/PW, B/PDI/PW
- CW, B/CW, B/CFM/CW mode
- B/E, E mode
- Split B/Color real time mode
- 3D, 4D mode

Zoom

- Real time zooming
- 4 Steps: ×1.5, ×2.0, ×3.0, ×4.0
- Selectable zooming position
- Zoom frozen
- 4 Steps: ×1.5, ×2.0, ×3.0, ×4.0

Focus

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

Memory

- Cine-memory
- B-mode (max.2000 frames)
- M-mode (11 minutes)
- Hard disk 500 GB

Imaging Processing

2D mode

- 8-step TGC slide pots
- Gain: 0~100

Product data

- 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°~157°
- B steer: -20° ~ +20°
- B rotation: 0° ~ 270°
- Line density: 2 steps
- Inversion: left/right, up/down, rotate

M mode

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

Color mode

- Gain control: 0~100dB
- Pulse repetition frequency: 0.25KHz~6.0KHz
- Wall filter: 3KHz, 50 steps
- Median Filter: 0~3
- Threshold: 0~10
- Color Map: 0~10
- Smooth: -3~3
- Color persistence: 0~7
- Line density: 2 steps
- Color enhancement: 6~16
- Velocity: 0.1cm/s ~ 298.4cm/s
- Color frequency: 4 steps
- Power: 0~100%, $-\infty$ dB ~ 0 dB
- Baseline: 17 steps
- Steer: -20° ~ +20°
- Priority: 85 steps
- Sampling volume: 1~128

PW mode

- Gain: 0~100dB
- D map: 0~23
- Frequency: 3 steps
- Chroma: 0~8
- PRFd: 0.25~25KHz
- Basic line: 31 steps
- Wall filter: 6.25 KHz, Max, 50 steps
- Angle: -80°~+80°
- Sampling volume: 0.5~40.0mm
- Volume: 0~100%
- D Speed: 1~5
- Smooth: 0~3
- Power: $-\infty$ dB ~ 0 dB, 0~100%
- Steer: -20° ~ +20°

CW mode

- Gain: 0~100dB
- Map: 0~23
- Speed: 1~5
- Volume: 0~100%
- Power: $-\infty$ dB ~ 0 dB, 0~100%
- Smooth: 0~3
- Chroma: 0~8
- Frequency: unadjustable
- WF: 24.414KHz, Max, 50 steps
- Angle: -80°~+80°
- Scale: 1~9

4D Lite mode

- 4D map: 31 steps
- Color: 0~4
- Rotate angle: 0° ~ 270°
- 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%

Product data

ECG mode

- Gain: 1~8
- Position: 1~10
- Interval: ON/OFF
- ESP: 0~3
- Color: 1~4
- Hide: ON/OFF

- HR (heart rate)
- PG (pressure)

Measurement & Calculation

Measurement

2D mode (General)

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

- 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)

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)

Calculation

Abdomen

- Liver
 - Long Left Lobe
 - Anteroposterior Left Lobe
 - Angle Left Lobe
 - Obli R Lobe
 - Anteroposterior Right Lobe
 - Angle Right Lobe
 - Portal Vein
 - IVC (Inferior Vena Cava)
 - SMA (Superior Mesenteric Artery)
 - CELA (Celiac trunk)
 - AO (aortaventralis)
- Gallbladder



- Length
- Anteroposterior
- Transverse
- Wall
- CBD (Common bile duct)
- LHD (Left hepatic duct)
- RHD (Right hepatic duct)
- Pancreas
 - Head
 - Body
 - Tail
 - MPD(Main pancreatic duct)
- Spleen
 - Length
 - Anteroposterior
 - Spleen artery
 - Spleen vein

Urology

- Kidney
 - Length Left Kidney
 - Anteroposterior Left Kidney
 - Transverse Left Kidney
 - Left Renal Artery
 - Length Right Kidney
 - Anteroposterior Right Kidney
 - Transverse Right Kidney
 - Right Renal Artery
- Ureter
 - Left
 - Right
- Bladder
 - Length
 - Anteroposterior
 - Transverse
 - Volumen
- After the urine bladder
 - Length

- Anteroposterior
- Transverse
- Simpson Residual Urine
- Prostate
 - Volumen
 - PSAD (Prostate specific antigen Density)

Gynecology

- Uterus
 - Length
 - Anteroposterior
 - Transverse
 - Endometrium
- Cervix
 - Length
 - Anteroposterior
 - Transverse
- Ovary
 - Length Left
 - Anteroposterior Left
 - Transverse Left
 - Length Right
 - Anteroposterior Right
 - Transverse Right
- Follicle
 - Volume 1
 - Volume 2
 - Volume 3

Obstetrics (1st Trimester)

- GS (gestation sac)
- CRL (crown-rump length)
- BPD (biparietal diameter)
- HC (head circumference)

- AC (abdominal circumference)
- FL (femur length)

Obstetrics (2nd and 3rd Trimesters)

- CRL (crown-rump length)
- BPD (biparietal diameter)
- HC (head circumference)
- AC (abdominal circumference)
- FL (femur length)
- Q (amniotic fluid index)
- OFD (occipitofrontal diameter)
- TAD (transverse trunk diameter)
- Placenta
- APD (Antero-posterior abdominal diameter)
- HL (humerus length)
- TL (tibia length)
- UL (ulna length)
- RL (radius length)
- FIBL (fibula length)
- OOD (outside Orbital distance)
- LV (Lateral ventricle)
- HW (Hemisphere width)
- NT (nuchal translucency)
- FTA (fetal torso transverse section)
- CER (cerebellum transverse diameter)
- Growth charts
- Biophysical profile

Fetal echo

- AO (aorta)
- LVOT (Left ventricular outflow tract)
- PA (Pulmonary artery)
- RVOT (Right ventricular outflow tract)
- LA (Left atrium)
- RA (Right atrium)

Thyroid

- Long Left Lobe
- Anteroposterior Left Lobe
- Transverse Left Lobe
- SUPA Left Lobe (Superior artery of Left Lobe)
- INFA Left Lobe (Inferior artery of Left Lobe)
- Long Right Lobe
- Anteroposterior Right Lobe
- Transverse Right Lobe
- SUPA Right Lobe (Superior artery of Right Lobe)
- INFA Right Lobe (Inferior artery of Right Lobe)
- Isthmus
- LCCA (Left common carotid artery)
- RCCA (Right common carotid artery)

Breast

- UI Left Breast (Upper internal of Left Breast)
- LI Left Breast (Lower internal of Left Breast)
- UE Left Breast (Upper external of Left Breast)
- LE Left Breast (Lower external of Left Breast)
- UI Right Breast (Upper internal of Right Breast)
- LI Right Breast (Lower internal of Right Breast)
- UE Right Breast (Upper external of Right Breast)
- LE Right Breast (Lower external of Right Breast)

Testes

- Long Left Testis
- Anteroposterior Left T Testis

Product data

- Transverse Left T Testis
- Long Left Epididymis
- Anteroposterior Left Epididymis
- Long Right Testis
- Anteroposterior Right Testis
- Transverse Right Testis
- Long Right Epididymis
- Anteroposterior Right Epididymis

Neonate

- Left LV (Left lateral ventricle)
- Right LV (Right lateral ventricle)
- 3rd (Third cerebral ventricle)
- HW (Hemisphere width)

Peripheral vascular

- Diameter

- Left AXIA (Left axillary artery)
- Left BRAA (Left brachial artery)
- Left RADA (Left radial artery)
- Left ULNA (Left ulnar artery)
- Left FEMA (Left femoral artery)
- Left POPA (Left popliteal artery)
- Left DORA (Left dorsal artery)
- Right AXIA (Right axillary artery)
- Right BRAA (Right brachial artery)
- Right RADA (Right radial artery)
- Right ULNA (Right ulnar artery)
- Right FEMA (Right femoral artery)
- Right POPA (Right popliteal artery)
- Right DORA (Right dorsal artery)
- Vein

- Intima

- Left AXIA (Left axillary artery)
- Left BRAA (Left brachial artery)
- Left RADA (Left radial artery)
- Left ULNA (Left ulnar artery)

- Left FEMA (Left femoral artery)
- Left POPA (Left popliteal artery)
- Left DORA (Left dorsal artery)
- Right AXIA (Right axillary artery)
- Right BRAA (Right brachial artery)
- Right RADA (Right radial artery)
- Right ULNA (Right ulnar artery)
- Right FEMA (Right femoral artery)
- Right POPA (Right popliteal artery)
- Right DORA (Right dorsal artery)
- Vein

- Intima-media

- Left AXIA (Left axillary artery)
- Left BRAA (Left brachial artery)
- Left RADA (Left radial artery)
- Left ULNA (Left ulnar artery)
- Left FEMA (Left femoral artery)
- Left POPA (Left popliteal artery)
- Left DORA (Left dorsal artery)
- Right AXIA (Right axillary artery)
- Right BRAA (Right brachial artery)
- Right RADA (Right radial artery)
- Right ULNA (Right ulnar artery)
- Right FEMA (Right femoral artery)
- Right POPA (Right popliteal artery)
- Right DORA (Right dorsal artery)
- Vein

- %D Reduce

- Left AXIA (Left axillary artery)
- Left BRAA (Left brachial artery)
- Left RADA (Left radial artery)
- Left ULNA (Left ulnar artery)
- Left FEMA (Left femoral artery)
- Left POPA (Left popliteal artery)
- Left DORA (Left dorsal artery)
- Right AXIA (Right axillary artery)



- Right BRAA (Right brachial artery)
 - Right RADA (Right radial artery)
 - Right ULNA (Right ulnar artery)
 - Right FEMA (Right femoral artery)
 - Right POPA (Right popliteal artery)
 - Right DORA (Right dorsal artery)
 - Vein
- %A Reduce (%Area reduce)
 - Left AXIA (Left axillary artery)
 - Left BRAA (Left brachial artery)
 - Left RADA (Left radial artery)
 - Left ULNA (Left ulnar artery)
 - Left FEMA (Left femoral artery)
 - Left POPA (Left popliteal artery)
 - Left DORA (Left dorsal artery)
 - Right AXIA (Right axillary artery)
 - Right BRAA (Right brachial artery)
 - Right RADA (Right radial artery)
 - Right ULNA (Right ulnar artery)
 - Right FEMA (Right femoral artery)
 - Right POPA (Right popliteal artery)
 - Right DORA (Right dorsal artery)
 - Vein
- Left ECA (Left external carotid artery)
 - Right CCA (Right common carotid artery)
 - Right BIF (Right common carotid artery Bifurcation)
 - Right ICA (Right Internal carotid artery)
 - Right ECA (Right external carotid artery)
- Intima
 - Left CCA (Left common carotid artery)
 - Left BIF (Left common carotid artery Bifurcation)
 - Left ICA (Left Internal carotid artery)
 - Left ECA (Left external carotid artery)
 - Right CCA (Right common carotid artery)
 - Right BIF (Right common carotid artery Bifurcation)
 - Right ICA (Right Internal carotid artery)
 - Right ECA (Right external carotid artery)
- %D Reduce (%Diameter reduce)
 - Left CCA (Left common carotid artery)
 - Left BIF (Left common carotid artery Bifurcation)
 - Left ICA (Left Internal carotid artery)
 - Left ECA (Left external carotid artery)
 - Right CCA (Right common carotid artery)
 - Right BIF (Right common carotid artery Bifurcation)
 - Right ICA (Right Internal carotid artery)

Orthopedics

- Hip Joint

Carotid

- Diameter
 - Left CCA (Left common carotid artery)
 - Left BIF (Left common carotid artery Bifurcation)
 - Left ICA (Left Internal carotid artery)

Product data

- Right ECA (Right external carotid artery)
- %A Reduce
 - Left CCA (Left common carotid artery)
 - Left BIF (Left common carotid artery Bifurcation)
 - Left ICA (Left Internal carotid artery)
 - Left ECA (Left external carotid artery)
 - Right CCA (Right common carotid artery)
 - Right BIF (Right common carotid artery Bifurcation)
 - Right ICA (Right Internal carotid artery)
 - Right ECA (Right external carotid artery)

Cardiology

- RVAWd (Right ventricular anterior wall diastolic)
- RVd (Right ventricle diastolic period)
- IVSd (Inter-ventricular septum in diastolic period)
- LVd (Left ventricle in diastolic period)
- LVPWd (Diameter of left ventricle posterior wall in diastolic period)
- RVAWs (Right ventricular anterior wall systolic period)
- RVs (Right ventricular systolic period)
- IVSs (Inter-ventricular septum in systolic period)
- LVPWs (Diameter of left ventricle posterior wall in systolic period)
- RVOT (Right ventricular outflow tract)
- AO (Aorta)
- LA (Left atrium)
- IVC (Inferior vena cava)
- PA (Great artery short axis view)

Physical Features

Connectivity

- Video out port
- S-Video out port
- Audio in port
- Audio out port
- MIC
- VGA out port
- 4 USB port
- Printer control port
- AC power input port
- HDMI digital port
- RJ-45 port
- Foot SW
- ECG port

Dimension

- Gross dimension:
 - 950 mm (H) X 670 mm (W) X 1220 mm (D)
 - 950 mm (H) X 670 mm (W) X 1200 mm (D)(RoHS)
- Net dimension:
 - 760 mm (H) X 530 mm (W) X 1360~1425 mm (D)

Weight

- Gross weight
 - 90kg
- Net weight
 - 70kg

Power Requirements

- Voltage: 220V±22V~(230±23V for EU countries)
- Frequency: 50Hz±1Hz; 60Hz±1Hz
- Rated Power: 500VA



Product data

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

Software & Accessories

Standard Accessories

- Power Cable
- Operation Manual
- Potential equalization conductor
- Printer control cable
- S-Video cable
- Fuse
- BNC/RCA cable
- Dust-proof cover
- Recovery system CD
- Wireless network antenna
- 4D training CD

Optional software language

- Chinese/English/Russian/Spanish/
French/Turkey

Optional Accessories

- Video printer
- LaserJet or inkjet printer
- Biopsy guide
- Foot switch
- ECG cable

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.



Probe

Model mode	Applications	Transmit frequency (MHz)	Max. depth	View field	Array radius	Max. Frames (Hz)	Biopsy guide
Convex probe							
C3L60C	Abdomen Gynecology 1 st Trimester 2 and 3 Trimesters Multifetation Fetal echo Urology Abdomen(pen) Urology(pen)	B mode: 2.0/2.5/3.3/4.2/5.0 Color mode: 2.0/2.5/3.0/3.5 PW mode: 2.5/3.0/3.5 Harmonic: 2.0/2.5/3.3	30.8cm	74°	R60	1112	Available
C3I20C	Cardiology, Cardiology (PEN), Paediatrics Cardiac Abdomen	B mode: 2.0/2.5/3.3/4.2/5.0 Color mode: 2.0/2.5/3.0/3.5 PW mode: 2.5/3.0/3.5 Harmonic: 2.0/2.5/3.3	30.8cm	110°	R20	2002	Invalid
C3L40C	Abdomen Gynecology 1 st Trimester 2 and 3 Trimesters Multifetation Fetal echo Urology Abdomen(pen) Urology(pen)	B mode: 2.0/2.5/3.3/4.2/5.0 Color mode: 2.0/2.5/3.0/3.5 PW mode: 2.5/3.0/3.5 Harmonic: 2.0/2.5/3.3	30.8cm	85°	R40	1112	Available
4D Probe							
C5L40C (4D probe)	Abdomen Gynecology 1 st Trimester 2 and 3 Trimesters Multifetation Fetal echo Urology	B mode: 4.0/4.7/5.5/6.2/7.0 Color mode: 2.5/3.0/3.5/4.5 PW mode: 2.5/3.0/3.5 Harmonic: 4.0/4.7/5.5	30.8cm	68°	R40	910	Invalid
C3I20C (4D Vaginal)	Gynecology 1 Trimester Urology	B mode: 4.0/5.0/6.0/7.0/9.0 Color mode: 4.2/5.0/5.7/6.5 PW mode:	12.6cm	146°	R10	2002	Invalid

Product data

		5.0/5.7/6.5 Harmonic: 4.0/5.0/6.0					
Linear probe							
L8L38C	Thyroid Breast Testes Peri.Arteries Carotid Orthopaedics Podiatry Superficial Small Part (pen) Vessel(pen)	B mode: 5.0/6.6/7.5/10.0/12.0 Color mode: 5.6/6.2/7.5/8.2 PW mode: 5.0/5.7/6.2 Harmonic: 5.0/6.6/7.5	9.5cm	38mm		589	Available
L8L50C	Thyroid Breast Testes Peri.Arteries Carotid Orthopaedics Podiatry Superficial Small Part (pen) Vessel(pen)	B mode: 5.0/6.6/7.5/10.0/12.0 Color mode: 5.6/6.2/7.5/8.2 PW mode: 5.0/5.7/6.2 Harmonic: 5.0/6.6/7.5	9.5cm	50mm		770	Available
Phased array probe							
P3F14C	Cardiology Cardiology (pen) Paediatrics Cardiac Abdomen TCD	B mode: 1.7/2.0/2.5/3.3/4.0 Color mode: 1.5/2.0/2.5/3.0 PW mode: 1.5/2.0/2.5 Harmonic: 1.7/2.0/2.5	30.8cm	20.5 mm		1112	Invalid
Trans-vaginal probe							
V6L11C	Gynecology 1 Trimester Urology	B mode: 4.0/5.0/6.0/7.0/9.0 Color mode: 4.2/5.0/5.7/6.5 PW mode: 5.0/5.7/6.5 Harmonic: 4.0/5.0/6.0	13.4cm	157°	R11	2002	Available
Trans-rectal probe							
U5L50C (bi-plane probe)	Gynecology 1 Trimester Urology	B mode: 5.0/6.6/7.5/10.0/12.0 Color mode: 5.6/6.2/7.5/8.2 PW mode: 5.0/5.7/6.2 Harmonic: 5.0/6.6/7.5	9.5 cm	183.4°	R10	2002	Available

