The High-Performance Portable Digital Color Doppler System

Apogee C1 Data Sheet

Powered by brand new platform Realview⁺, Apogee C1 high-performance portable digital color Doppler imaging system provides comprehensive professional solution kit supports all-round diagnosis with exceptional imaging performance and efficient workflow.

Highlights

- ***Realview⁺ Platform***
- ***Workflow 3.0***
- ***MFI***
- ***S-Station***
- ***S-View***
- ***Strain Elastography***
- ***Auto OB***

General Specification

Dimension	
Gross dimension (mm)	630*330*510(2 probes) 630*420*510(4 probes)
Net dimension (mm)	380*107*361 430*150*361(with probe holder)

Weight	
Gross weight	13kg (2 probes) 16.5kg(4 probes)
Net weight	6.5kg (Including 1 Battery)

Power Requirements	
Battery	Rated Voltage: DC 11.1V Charging Voltage: DC 12.6V Rated Capacity: 7500mAh, 83.25Wh
Adapter	Input: AC 100-240V, 2.5A, 50 Hz/ 60Hz Output: DC 15V, 10A Rated Power: 120VA

Operation Conditions	
Ambient temperature	0℃ to +40℃
Relative humidity	30% to 85%
Atmospheric pressure	70kPa to 106kPa

Stored Conditions	
Ambient temperature	-20℃ to +60℃
Relative humidity	15% to 93%
Atmospheric pressure	50kPa ~ 106kPa

Connectivity	
Video output	HDMI/VGA/S-video port
Network port	
USB 3.0 port	
Type-C port	
ECG port	
Adapter port	

Foot switch port

Printer port

Appearance

Ergonomic appearance

Monitor	· 15.6" high resolution color monitor · Angle Adjustment Lean back 30° · Visual Angle L&R 85°/U&D 85°
Control panel	· Backlit keyboard · 8 TGC
Battery	· Working Time: About 120 min

3 Active Probe Connectors

Solid State Disk: 1T

System Overview

Standard Features	
Frequency	·Fundamental Frequency ·THI (Tissue Harmonic imaging) ·MFI (Inversion THI) ·Fusion Frequency: Pen/Gen/Res
Speckle reduction	·Nanoview
X-Beam	Compound Imaging

Series customization	·Examination customization ·Measurement customization ·Annotation customization ·Bodymark customization ·Report template customization

Quick ID

Q-Preset

Trapezoidal/Extend imaging

Duplex/Triplex

Panoscope

Auto IMT

Auto Volume

Auto Flow

View Lock

M

CFM/PDI/DPDI/VS Flow

PW/HPRF

Semi-auto EF

Free Hand 3D

Auto OB

S-View

S-Station

S-Helper

Account management

Smarchive

Historical Archive Query

Post Processing

Spectrum measurement	·Auto Trace ·Semi Auto Trace ·Manual
Reverse Import	
Cursor Zoom	
Raw Data Analysis	
Auto Fit	Automatic Optimization

Optional Features

DICOM 3.0 (Basic)

DICOM 3.0 (Advance)

DICOM 3.0 (Cardiac SR)

DICOM 3.0(OB SR)

DICOM 3.0(Breast SR)

PV Imaging

AMM

Color M

CW

ECG

Auto EF Plus

Auto SG Plus

TDI (TVI, TVM, TVD)

Micro Flow

Strain Elastography

Needle Enhancement

Auto HIP

Auto NT

Auto Optimal View

Auto FLC

eFAST

MyWorkflow

SonoAir

Standard Accessories

Video Cable	· HDMI Cable · S-video Cable
Power Cable	
Printer Control Cable	
Operation Manual	
Recovery System USB	
Power Adapter	
Probe Holder	

Optional Accessories

Printer	· Video printer · Laser or inkjet printer
Biopsy Guide	· Convex probe · Linear probe · Transvaginal probe · Transrectal probe
Trolley	· CR-50
Probe Switcher	· TQ-B008(Extends 1 socket to 2 sockets; Metal shell)

	· TQ-B010(Extends 1 socket to 4 sockets;Metal shell)

Trolley Case

Wireless Adapter

ECG Cable

Display Mode	
B	· B, 2B, 4B
M	· M, B+M · B+M+CFM · B+TDI+M · AMM
B+Color	· B+CFM, B+PDI, B+DPDI · B+VS Flow · Split B/CFM
B+Spectrum	· B+PW · B+CW · HPRF
B+Color+ Spectrum	· B+CFM+PW · B+PDI+PW · B+DPDI+PW · B+VS Flow+PW · B+CFM+CW
Extend Mode	· Trapezoid/Ext (Convex probe) · Panoscope

General Parameters	
GPU+CPU	
Windows 10	
System language	English, Spanish, German, Russian, French, Italian, Portuguese
Input language	English, Spanish, German, Russian, French, Italian, Portuguese

Broadband/Multi-Frequency Technology

System signal processing bandwidth	
Gray scale	256
Dynamic Range	30-245dB
Max. Frame Rate	Based on probe and mode
Maximum image display depth	Based on probe
Zoom	· HD Zoom · Full-View Zoom · Full Screen
Focus	· Continuous dynamic focus · 1-8 selectable transmit focus · SF (Small Focus)

8-step TGC slide pots

Digital LGC & Digital TGC

2D Mode
· BG (B Gain)
· Depth

System Parameters

· Frequency

· X-Beam

· ENH(Edge Enhancement)

· Smooth

· Nanoview

· Persistence

· Chroma

· Gray Map

· Power

· B steer (Linear probe)

· B rotation

· TSI

· Line density

· Inversion

· Dual View/ Quad View

M Mode

· MG (M Gain)

· Sweep speed

· Gray Map

· Chroma

· Display layout

· AMM

CFM/PDI/DPDI Mode

· CG (C Gain)

· Scale (PRF)

· Frequency

· Wall filter

· C Priority

· C Gate

· Median Filter

· Thred

· Color Map

· Smooth

· Color persistence

· Line density

· Color enhancement

· B MIX

· Power

· Baseline (CFM)

· Steer (Linear probe)

· Tag Range (CFM)

· Tag Position (CFM)

· Color Hidden

· B/C split

· VS Flow

· Color U/D

PW Mode

· PWG (PW Gain)

· Frequency

· Gray Map

· Chroma

· Scale (PRF)

· Duplex/Triplex

· Baseline

· Steer (Linear probe)

· Wall filter

· Angle

· Sampling volume

· Volume

· Sweep Speed

· Smooth

· Power

· Auto Trace

· Display layout

· Trace Type

· Trace Correction

· Trace Sensitivity

Auto Fit

The system can reduce noise and artifacts purify tissue shading and edging improve contrast resolution and help early identification of tissue/structure lesion

Available on B/CFM/PW

Post Processing

Parameter or mode can be adjusted in the saved original data image or movie, it helps to better diagnose the lesion

Available on B/CFM/PW/M mode

Quick ID

Quickly create ID, no need to input patient information, suitable for emergency situations

Q-Preset

Without entering the setup interface, the user-defined parameters can be saved quickly with one click to improve the operation efficiency

Archive Data Protection

The system will automatically continue the last exam if it is ended abnormally, it helps to protect archive data

Historical File Query

After inputting the patient ID, the system will automatically search for the existence of previous files, so that doctors can consult and quickly understand the patient's situation

S-View

File comparison function to simultaneously compare multiple files, including images and films

S-Station

Image processing system to select or create report templates, and quickly add system default report entries

Reverse Import

General measurement results can be set as specialty measurement items and be used in related calculations

Independent Sound Control

Sound of the spectrum and the buttons on the touch screen and control panel can be controlled independently to meet the daily needs of different users

Measurement Cursor Zoom

During the measurement process, the enlarged image around the measurement cursor is displayed in the lower right corner of the screen, which is suitable for the measurement of small lesions and accurate positioning

Trapezoidal (Virtual Convex)

Available on linear transducers

Extended Angle: L/R 15°

Panoscope

Available on Linear/Convex/Phased array transducers

Scale mark	
Advance function	Measure, Annot, Zoom, Rotate, Crop
Color Panoscope	

VS Flow

Based on MircoFlow, VS-Flow significantly upgrades the sensitivity and resolution of blood flow which helps doctors to maximize the clinical application value

Auto IMT

Auto IMT greatly improve the accuracy of intima-media measurement, simultaneously measure the thickness of anterior and posterior intima-media, and improve the clinical efficiency

Strain Elastography

visualize the stiffness of tissues in real time by delivering an external compression on the tissues.

·Clarity

·Smooth

·EG(E Map)

·Persistence

·Dynamic range

·E Gain

·Dual live with E and B mode

·Pressure pilot lamp

·Pressure guide with motion curves

Available on the Linear/Vaginal probes

S-Helper

Tutorial software

Provide anatomical diagram illustrations and real-time scanning examples
Scanning method

Calculation	
Measurement package	General, Abdomen, Brain, Cardiology, Carotid, Diaphragm, Early OB, Emergency, Endocrine glands, Fetal head assessment, Gynecology, Hip, MSK, OB, Pediatrics, Pelvic, Peri. Nerve, Peri. Vessel, Small Part, Stomach Intestines, Urology
Expand the measurement menu automatically	
Measurement Rule: Repeat, Next, Non	
Measurement Across Modes	Measurement items in different modes are contained in the same measurement package. When the mode is activated, the corresponding measurement items are also activated
Measurement Result	· Reverse Import · Delete any measurement item at will · Move location at will · Adjustable size and color

Annotation	
Annotation package	Abdomen, Breast, Cardiology, Carotid, Early OB, Fetal Echo, GYN, Lower Limb Artery, Lower Limb Vein, MSK, Nerve, OB 2-3T, Orthopedic, Pelvic, Superficial, TCD, Testicle, Thyroid, Upper Limb Artery, Upper Limb Vein, Urology, Lung, Diaphragm, head, chest, Upper limb, lower limb, Stomach Intestines
The content of the annotations is displayed according to the location, tissue, and lesion classification	
Position of annotation can be changed	
Size and color of the entry can be changed during the annotation process	

Bodymark	
Bodymark package	Abdomen, Breast, Cardiology, Carotid, Early OB, Eye, GYN, MSK, Lung, OB, Orthopedics, Pelvic, Peri. Nerve, Peri. Vessel, TCD, Superficial, Testicle, Thyroid, Urology
Size and Position of the body mark can be changed	
Position of bodymark marking point can be changed during use	
Body mark can be added in each single B mode image in 2B /4B mode	

Smarchive
Display the number of images in each archive
Preview images and movies without entering archives
Archive Backup Function

Archive Transmission	·Background transmission ·Multi path simultaneous transmission ·Task manager to view the transfer progress

Store forward or backward

Worksheet

Measurement results are placed in the front, which can be viewed without the need to enter the worksheet

Specialty worksheet for easy viewing and comparing the measurement results of various exam types

Worksheet interface supports modifying patient information

Report type	PDF, HTML, DICOM SR

S-Station

Memory

Film Length	2D playback: 1~10000 frames M PW DVR record 4D playback
Image Format	Raw data (sfm, vol (4D mode)) /BMP/ JPG/ DCM/ TIFF
Cine Format	Raw data (cin, vols (4D mode)) /AVI/ MP4/ DCM

Reedit the movie playback area

2B/4B movie playback simultaneously