

CBS-USB Module

■ Specification

Size and Weight

Size: 318 mm×89 mm×161 mm
Weight: 3.1 kg

Power Supply

Voltage: a.c. 100V~240V
Frequency: 50 Hz/60Hz
Pmax: 60VA
FUSE: 2*T1.6AL/250V, Φ5×20

Signal Interface: USB port: Standard "B" series connector, support USB2.0&USB1.1

Range & Accuracy of Clinical Parameters

2MHz PW:

Frequency Range: 10Hz~15 KHz
Velocity Range: Up to 590cm/s
Accuracy: ±10%

4MHz CW

Frequency Range: 10Hz~30 KHz
Velocity Range: Up to 590cm/s
Accuracy: ±10%

8MHz CW

Frequency Range: 10Hz~30 KHz
Velocity Range: Up to 290cm/s
Accuracy: ±10%

System Requirements

Computer Configurations (Recommended)

Processor: Pentium® 4 2.8G or greater
RAM: DDR 512MB
Hard Disk: Minimum 80GB
Input and output ports: At least 1 USB2.0
Printer: Color ink-jet printer

System Parameters

M-Mode display: 32 gates
Multi-Depth: Simultaneous display of up to 8 spectrums per probe
2MHz PW Depth Range: 20-177mm, adjustment of 2mm
1MHz/2MHz PW Gate Range: 4-20mm with step 1mm
Gain: 0-40dB with step 1dB
Power: PW10%~700% CW10%~40%
DNR: 0~8 level with step 1

Filter: 50, 100, 200, 400, 600, 800Hz, Optional non-filtering out of very low frequency signals
Spectrum display colors: 256 colors with 6 medical coding schemes
FFT: 128, 256

Database

Data base: Standard Access data base
Database operation: View, edit (update), delete, search and statistic for patient and exam info
Spectrum replay: Spectrum saved to the database could be loaded, printed and replayed

Data Analysis

Internal raw data storage on hard disk:
Up to 8 gates, long-term continuous recording and replay
Envelopes display:
ON/OFF, option to select Forward envelope, Reverse envelope or both
Measurement: Auto or manual measurement to get medical parameters
Off-line evaluation:
Spectrum replay, annotation, measurement for off-line evaluation
Data saved:
Auto or manual save examinations; And spectrums also can be saved as BMP files or JPEG files
Blood vessel preset:
Preset blood vessel parameters or select default setting
Exam order:
Auto jump to next vessel function and vessel order permutable
Thrombus detection:
Auto thrombus detection and count

Monitoring

No. of spectrums: Up to 8 per 2MHz PW probe
No. of Trend curves: Up to 7 according to the numbers of selected parameters
HITS Display: Real time histogram of HITS energy distribution

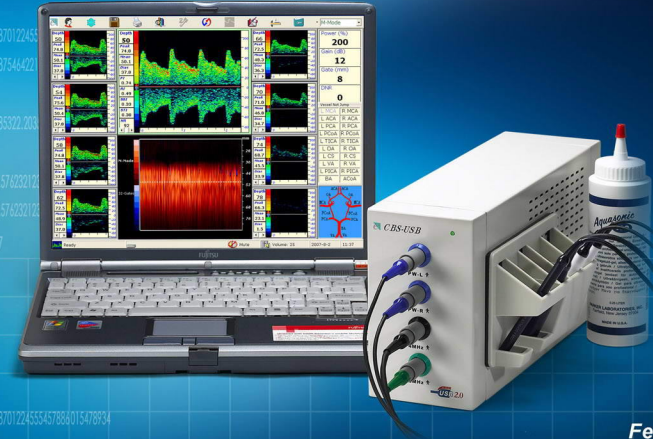
Patient Report

Basic function: Auto generates and preview report
Report generator:
Patient reports can be saved in many formats: DOC(Word) and PDF(Acrobat)
Report size: A4 or B5
Report types: normal (spectrums), table, and chart
Selectable page format: standard or defined

Configurations

Intracranial	Extracranial		Single channel, dual spectrums	Single channel, four spectrums	Single channel, eight spectrums	Dual channel, dual spectrums	Dual channel, four spectrums	Dual channel, eight spectrums	Monitoring	Multi-gates M-mode
	4MHz	8MHz								
•	•	Opt	•				Opt		Opt	Opt

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1234546521.576732123223152
00245302887
001
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3200
2142
1024
1230101243870122455
015478934887544422
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01622208498322.2038
0123412
1234546521.57673212
1234546521.57673212
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123010124387012245545457886015478934



Features
Multi-gate M mode
Emboli detection
Compact and light weight
Friendly user interface

CBS-USB Module



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Features and specifications are subject to change without notice

ENG-VA-CBS-USB module-V1.0-20090306

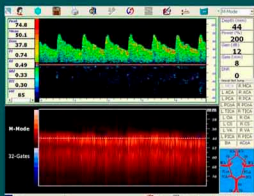




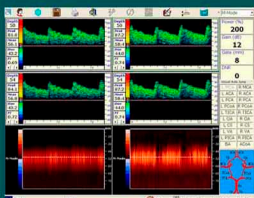
The CBS-USB Module is a compact and robust Doppler system, which is characterized by its Doppler quality and its compatible, flexible and modular operation. CBS-USB Module provides 2, 4 and 8MHz transducer to perform all clinical routine and monitoring examinations and emboli detection at reasonable price. CBS-USB Module offers single channel, dual channels, Multi-gates M-mode, emboli detection function and so on. It also provides improved accuracy and reliability, and the powerful database. The report generator can make a report with word or PDF format.

CBS-USB Module

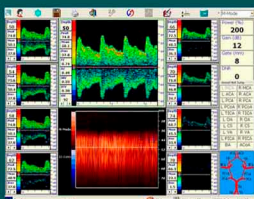
provides following working mode:



Single spectrum M-mode



Bilateral four spectrums M-mode



Eight spectrums M-mode

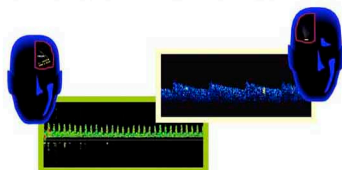
Multi-gates M-mode

CBS-USB module produce a powerful, high resolution M-Mode display, with Doppler signals displayed along the ultrasound beam at varying gates (32 gates). This makes it possible to simultaneously receive and analyzes Doppler signals from a predefined range of depths.

The Doppler M-mode display shows the intensity, direction and depth information of this range of depths continuously and in real-time. It provides an excellent graphical display of the blood flow in all vessels located in the sound beam. The Doppler M-Mode display allows moving through the entire depth range and thus easily selecting the best Doppler signals and most relevant clinical data.

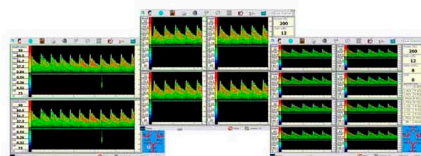
The clearly structured and intuitive user interface of the software as well as the freely configurable equipment settings, the automatic routine configuration program and the reports provide the optimal conditions for doctors to work quickly and effectively.

The integrated patient database, very easy to work with, offers a large variety of reports to choose from, which can be revised and supplemented with the help



Emboli detection

Emboli detection is very important to the early diagnosis of vessel disease. The Doppler ultrasound technique is one of the common methods to detect the emboli non-invasively. The CBS-USB Module advanced emboli detection algorithm provides a high degree of reliability. Use our tools to make your own advance assessment. This module allows you to view the audio signal and when using M-mode, you will actually see the emboli move from segment to segment.



Dual spectrums Four spectrums Eight spectrums

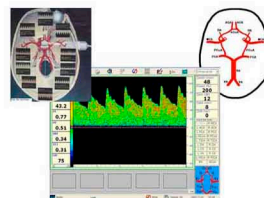
Single channel & Dual channels working mode

CBS-USB Module provides single channel & dual channels, multi depths working modes which can meet the different needs of doctors.

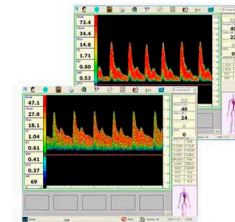
Dual channels working mode: Two probes detect multi-vessel with various gates for comparing left side with right side at the same time, it is fit for critical patients and research.

Both single channel and dual channels working modes offer dual spectrums, four spectrums, and eight spectrums.

Intracranial (2MHz transducer)



Extracranial (4/8MHz transducer)

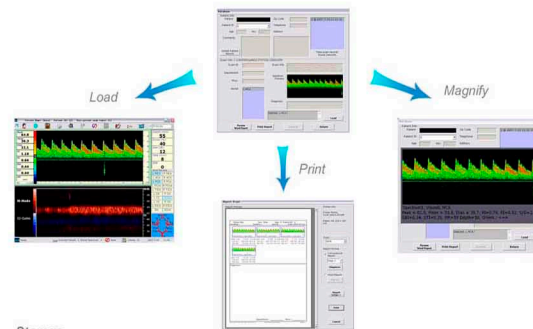


Within the cranium, the bony dome that houses and protects the brain, intracranial detection is to evaluate the effects of cerebral vessels such as Willis ring

As opposed to intracranial, extracranial detection is to evaluate the effects of carotid and peripheral vessels such as common carotid artery (CCA), internal carotid artery (ICA) and external carotid artery (ECA)

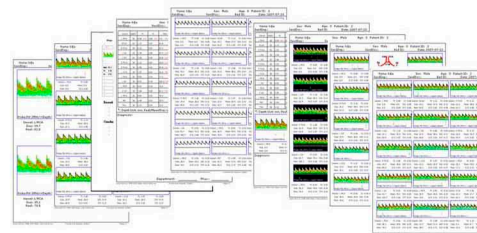
Monitoring

Monitoring is objective to observe the changes of cerebral blood flow velocities continuously, such as possibilities of hypoperfusion, hyper perfusion, and embolization. CBS-USB Module offers powerful monitoring working mode: Single channel, dual spectrums Dual channels, dual spectrums Dual channels, four spectrums



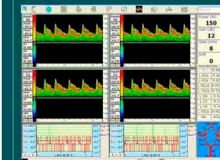
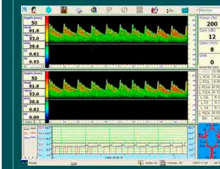
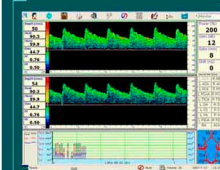
Storage

CBS-USB Module provides powerful storage capability. Spectrum, diagnosis information can be saved, reviewed and printed.



Print

Report generator can create report of word or PDF format. You can print different content what you want as long as you set the menu before printing.



Applicable with 2, 4, 8MHz handheld and 2MHz monitoring probes for Intracranial, extracranial, peripheral and microvascular Doppler diagnostics, and CBS-USB probe bracket for space saving.