VIASONIX

Advanced Vascular Technologies

Dolphin
Transcranial Doppler

Taking TCD Technology One Step Further
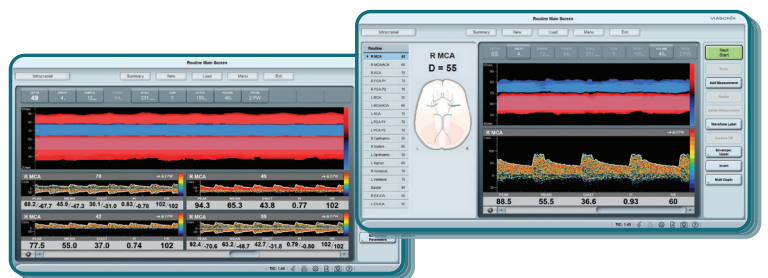
DOLPHINMAX **DOLPHIN**4D **DOLPHIN**IQ

www.viasonix.com

Experience the Power of the Dolphin, with Options Never Seen Before!

» Scroll back in time and save Doppler spectrums from different depths along the Ultrasound beam.
» View a suspected emboli travelling along the blood vessel
» Operate the Dolphin with a single operation button
» Receive immediate statistical database information
» Add a picture of the pathology to the examination report
» Complete network connectivity and cybersecurity solutions
» And much more!

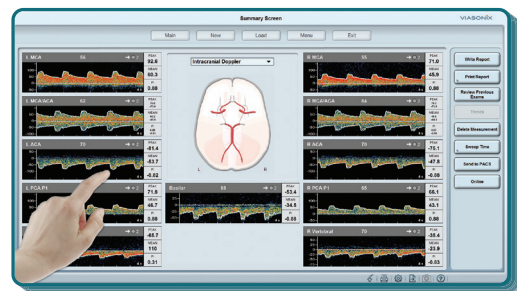## Highly Advanced Doppler Processing

» Spectrum, M Mode & Sound **replay at any depth!**
» Complete **Raw Data** for post processing
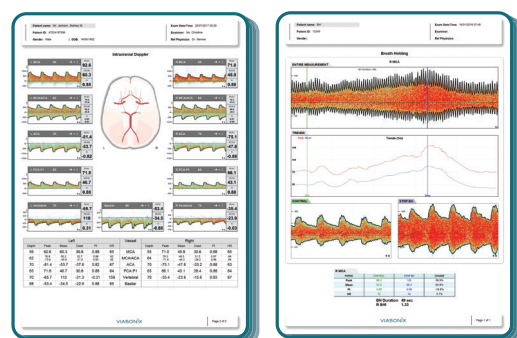» **Multi Depth** support
» **Velocity Profile** diagnosis

Friendly User Interface

» **One Key** Operation
» Designed for **Touch Screen**
» Unlimited Flexible **Protocols**
» Configurable **Display**
» Dynamic **Reporting**
» **Language** support

Complete Network Solution

» **DICOM** Worklist and Storage
» Programmable **Structured Report**
» **HL7** Interface
» **GDT** Connectivity
» Unlimited **Review Stations**
» Shared network database via SQL

Monitoring Headset

External Channels Connection Box

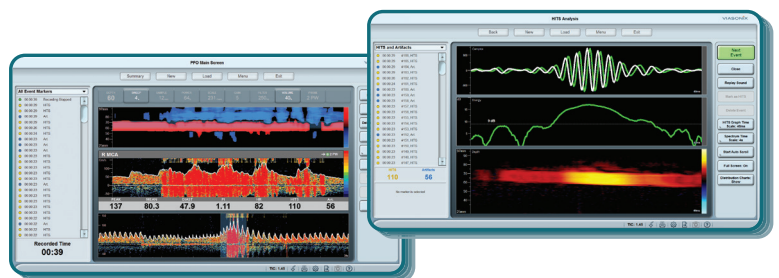**Wireless / Wired Remote Control**

Foot Switch

Clinical Applications & Specialty Tests

The Dolphin covers the complete range of clinical examinations expected from a TCD system, with dedicated protocols and reports.

» Vasospasm and SAH » HITS Detection » Monitoring » PFO » VMR and Autoregulation
» Intracranial Stenosis » Collateral Capacity » Arteriovenous Malformation » Brain Death
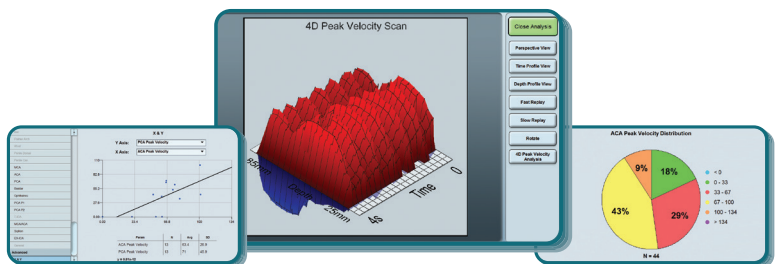» Sickle Cell Disease » Evaluation of ICP Changes » Breath Holding » Evoked Flow » And more...

Advanced HITS Detection

» Fast and thorough review of all **HITS**
» High resolution **HITS M-Mode display**
» Distribution **charts**
» Complex & Energy **graphs**

Research Oriented

» Variety of **export** formats including **Raw Data**
» **4D velocity** scan
» Built in **statistics** tool
» Informative **charts** and comparisons
» **Data mining**

Viasonix

Viasonix is the only international company that offers a wide range of advanced Peripheral Vascular and Transcranial Doppler (TCD) product lines. The company's state-of-the-art products meet common day-to-day routine clinical practice, as well as set new industry standards. Viasonix is focused on Doppler and blood flow applications, which provide dedicated clinical solutions primarily for neurology and neurosurgery departments, as well as for vascular and angiology settings. The user interface of the Viasonix product lines is internationally renowned, and we invite you to discover and experience our extremely user-friendly products.

Optional Stand

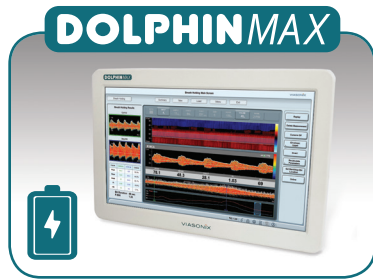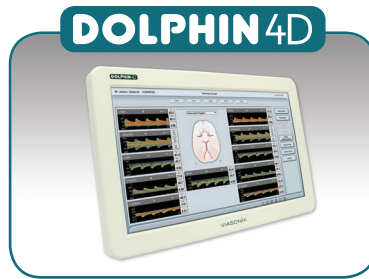### Range of Doppler Probes

2 MHz Monitoring   **2 MHz**   **4 MHz**   **8 MHz**   **16 MHz**

Dolphin Specifications

DOLPHIN*MAX*
The Next Generation Portable TCD System

DOLPHIN*4D*
The Ultimate TCD Standalone System

DOLPHIN*IQ*
The Ideal Cost-Effective TCD Module

	DOLPHIN MAX	DOLPHIN 4D	DOLPHIN IQ
Dimensions	47x30x7 cm	47x30x7 cm	27x21x5.5 cm
Weight	6 kg	6 kg	2 kg
Computer	Integrated	Integrated	External
Battery	Internal Rechargeable	No	No

General

Power: 110-220 V, 50-60 Hz
Dolphin/MAX Battery Operation Time: Up to 6 hours
Doppler Frequencies: 2 MHz, 1.6 MHz, 4 MHz, 8 MHz
Intraoperative: 16 MHz (Not for USA & Canada)
Probe Connectors: 5
Operating System: Windows 7/8.1/10 (32 or 64 bit)
Unilateral/Bilateral: Supported
CW/PW Probes: Supported
FFT Size Options: 64/128/256/512
Probe Holder: Integrated
Controls: Wired/Wireless remote control, Touch screen, Foot switch, Keyboard, Mouse

Dolphin/MAX and Dolphin/4D Integrated Computer

Screen: 18" Wide Screen LED with capacitive Multi Touch screen
VESA mount: Built in
Operating System: Windows 10 Enterprise, 64 Bit
CPU/RAM: Quad Core 2 GHz, 4 GB
Hard Drive: 1 TB Enterprise Grade SSD with power loss protection
USB Connection: x4, USB 3.0
Network: Ethernet
Speakers: Integrated

Dolphin/IQ Recommended Computer

Screen: 21"-24" Wide Screen with Touch Screen
CPU/RAM: i3/i5/i7, 4 GB or higher
Hard Drive: 1 TB or higher

Doppler Processing

Technology: Fully digital, 8000 channels for each side
M Mode: Dynamic up to 500 gates for selected depth range
Auto-Depth: Supported
Multi-Depth: Up to 8 spectrum depths
Replay: Spectrum, M Mode and Doppler audio at any depth
Raw Data Post Processing: Depth, Gain, Scale, Sample, Filter
Specialty Tests: Breath Holding, VMR, PFO, Sickle Cell, Vasospasm, Cognitive Response
Save: Automatic or Manual
HITS Detection: Simultaneous in multiple depths
HITS M-Mode display: 125 µs resolution
HITS Analysis Screen: with detailed events, distribution charts, complex & energy graphs
Continuous Monitoring: Trends display including zoom in/out
Event Markers: Automatic, Predefined, Alerts, Delta-mean

Software Features

Screen Display: Designed for wide screen and High Definition
Cybersecurity: According to FDA Guidelines
HIPAA: Patient privacy options
Protocols: Unlimited, fully configurable
Main Screen Layout: Fully configurable, interactive
Summary Screens: Interactive
User Profile Settings: Unlimited, user configurable
Designed Reports: Fully configurable
Free Text Report: Templates, tables, camera & pictures, TAGS
Waveform Labels: Manual and automatic with threshold display
Backup/Restore: Integrated. USB/DVD/Network, Manual/Automatic
Patient Details: Flexible layout
Medical History: Configurable, with indication fields
Storage: Configurable options, compressed data files
Camera: USB camera support
Maintenance: Automated protocol with detailed report
Languages: Supported

Connectivity

External Channels: Analog/Digital Input/Output (8/8)
Capnograph: Supported
Review Stations: Unlimited, including over network
Shared Database: Over network via Access or SQL
DICOM Worklist: Offline and Online
DICOM Store: BMP/JPG/PDF, multiple destinations
DICOM Features: Auto-send, auto-retry (queue)
DICOM Structured Report: Default/Programmable
HL7: Orders, Report, Query, Patient Registration
GDT: Patients and Report
PDF: Automatic Report Export
Email: With PDF attachment, using SMTP
Network Queue: Send reports while network is offline

Research Options

Export: PDF, BMP, JPG, PNG, Excel, VDL, Movie, Word, RTF, Raw Data, Anonymous PDF
Statistics: Advanced charts, Comparison graphs, X-Y Analysis
Advanced Display: Velocity Profile, Depth Scan, 4D Analysis
Data Mining: Available with advanced segments
Patient History: Quick review of previous exams, patient trends screen
Database Search: Multiple advanced options

Selected Approvals

ISO 13485, CE 0344, FDA and additional country-specific approvals

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