VIASONIX

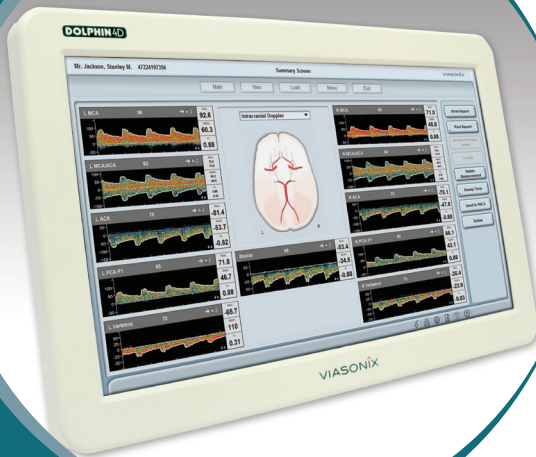# Experience the Most Advanced Transcranial Doppler Systems

DOLPHIN 4D

The Next Generation TCD Standalone System

Complete Cerebral Diagnosis

DOLPHIN IQ

The Ideal Cost-Effective TCD Module
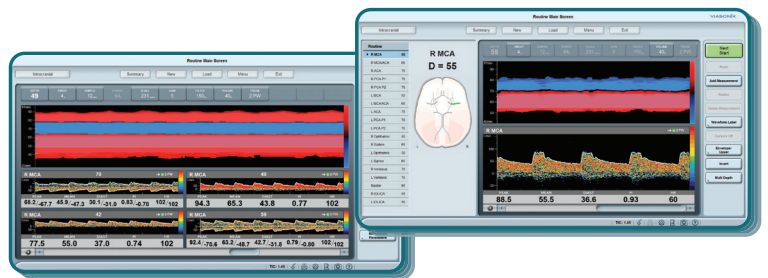
Unilateral/Bilateral Operation

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
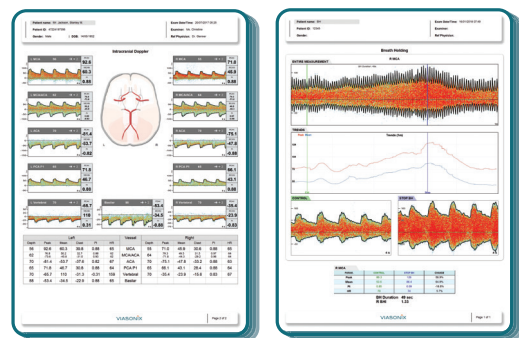» **Multi Depth** support
» **Velocity Profile** diagnosis

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

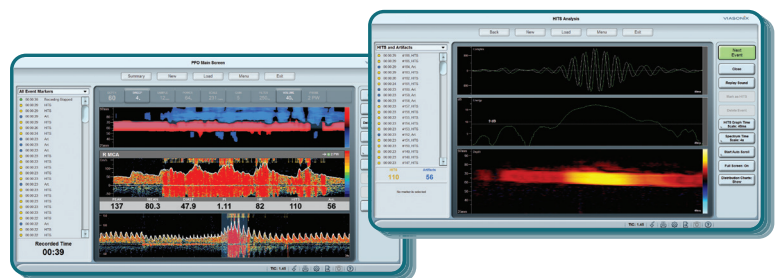| Monitoring Headset | Foot Switch | Wireless Remote Control | Wired Remote Control |

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
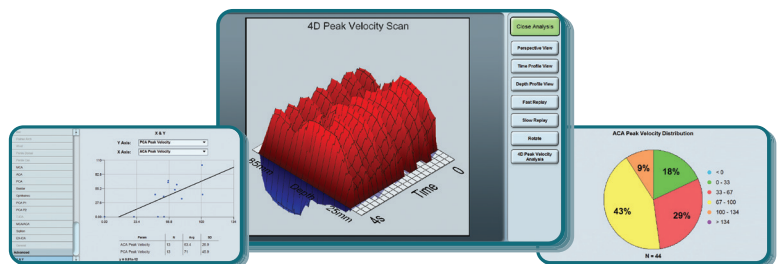» Sickle Cell Disease » Evaluation of ICP Changes » Breath Holding » Evoked Flow » And more...

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 has multiple product lines in addition to TCD. The Dolphin TCD product family is based on the most advanced and powerful Doppler technology. The Dolphin is designed with the patient and examiner in mind. Its user interface is extremely friendly and allows complete cerebral diagnosis and monitoring. The Dolphin has numerous regulatory approvals and is being successfully distributed around the world.
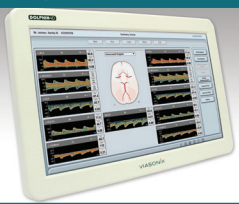

Optional Stand

Range of Doppler Probes

Experience the Power of the Dolphin!

Dolphin Specifications

DOLPHIN 4D   **DOLPHIN IQ**

Dimensions	47x30x7 cm	27x21x5.5 cm
Weight	6 kg	2 kg
Computer	Integrated	External

General

Power: 110-220 V, 50-60 Hz
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
Probe Holder: Integrated
Controls: Wired/Wireless remote control, Touch screen, Foot switch, Keyboard, Mouse

Dolphin/4D Integrated Computer

Screen: 18" Wide Screen LED with capacitive Multi Touch screen
VESA mount: Built in
CPU: Quad Core 2 GHz
RAM: 4 GB
Hard Drive: Western Digital 1 TB high performance
USB Connection: x4, USB 3.0
Network: Ethernet
Speakers: Integrated

Dolphin/IQ Recommended Computer

Screen: 21"-24" Wide Screen with Touch Screen
CPU: i3/i5/i7
RAM: 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
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
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
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 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

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 K170859 and additional country-specific approvals