

# Dolphin Transcranial Doppler

Taking TCD Technology One Step Further

**DOLPHINMAX**

Battery Operated TCD System

**DOLPHIN4D**

Standalone TCD System

**DOLPHINIQ**

TCD Module



*Discover the Most Advanced Bilateral TCD Robot in The Market*



  
**DOLPHINXF**  
TCD Robot

# Everything You Expect from a State-of-the-Art TCD System and Much More...

- ✓ Slim design, lightweight and battery operated
- ✓ 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
- ✓ Send reports and automatic worksheets to EMR and PACS
- ✓ And much more!

Experience  
the Power  
of the Dolphin

## Clinical Applications & Specialty Tests

### Routine Cerebral Examinations

Stroke Management  
Vasospasm and SAH  
Arteriovenous Malformation  
Intracranial Stenosis  
Collateral Capacity

### Specialty Tests

VMR / Autoregulation  
Breath Holding Test  
Patent Foramen Ovale (PFO)  
Sickle Cell Disease  
Brain Death Diagnosis  
Evoked Flow

### Continuous Examinations

Cerebral Monitoring  
Emboli Detection  
Endarterectomy  
Evaluation of ICP changes  
Intraoperative Doppler  
Intraoperative TCD Monitoring

## Discover the *Dolphin/XF*

The most advanced and unique bilateral TCD Robot in the market!

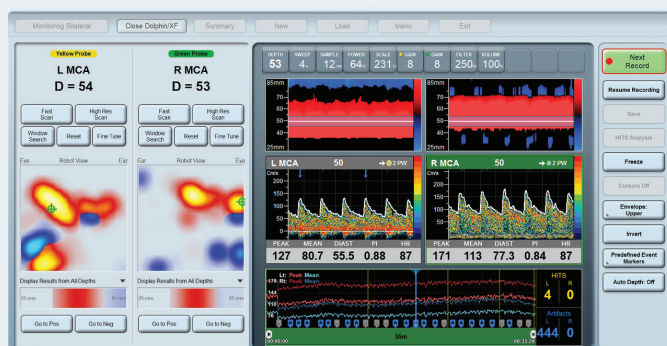


The *Dolphin/XF* TCD Robot Quickly scans the cerebral circulation and automatically assists in identifying blood flow velocities on the right and left sides of the brain. Using the *Dolphin/XF* is fast, simple and stable. Ideal for monitoring in the ICU, OR, and TCD lab, and for a range of specialty tests such as PFO or VMR tests.

### *Dolphin/XF* Selected Features:

- ✓ Comfortable Fabric Headset
- ✓ Automatic Bilateral Scan
- ✓ Auto Search along the Ultrasound Beam
- ✓ Position Memory and Maximum Position Accuracy
- ✓ Scan Across all Depths
- ✓ "Heat Maps" Identifying Cerebral Vessels
- ✓ Simple and Intuitive User Interface
- ✓ Disposable Headset
- ✓ Fast Scan Option in just a few Seconds
- ✓ Fully Compatible with all Dolphin TCD models

### Robotic Bilateral Scan



### Range of Accessories



Monitoring Headset



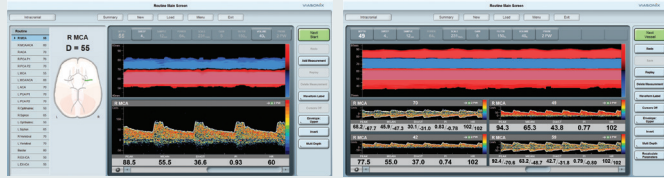
External Channels  
Connection Box



Wireless / Wired  
Remote Control



Foot Switch

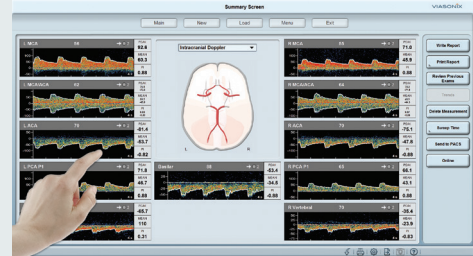


### Highly Advanced Doppler Processing

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

### User Friendly Interface

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



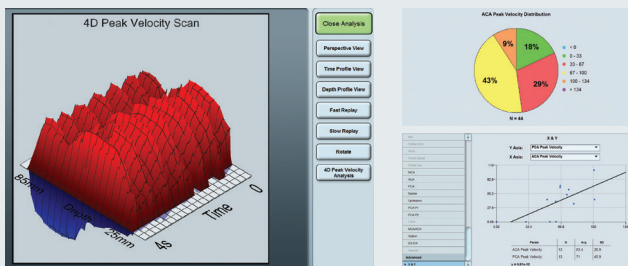
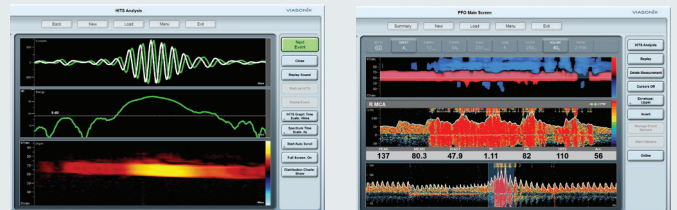
### Complete Network Solution

- ✓ EMR & PACS Connectivity
- ✓ DICOM Worklist and Storage
- ✓ Programmable Structured Report
- ✓ HL7 Interface
- ✓ GDT Connectivity
- ✓ Unlimited Review Stations



### 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

### About Us

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.



### Range of Doppler Probes



2 MHz Monitoring

2 MHz

4 MHz

8 MHz

16 MHz



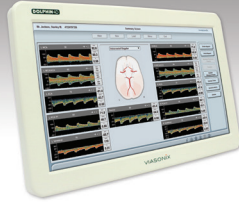
# Dolphin Specifications

**DOLPHINMAX**



**The Next Generation Battery Operated TCD System**

**DOLPHIN4D**



**The Ultimate TCD Standalone System**

**DOLPHINIQ**



**The Ideal Cost-Effective TCD Module**

<b>Dimensions</b>	47x30x7 cm	47x30x7 cm	27x21x5.5 cm
<b>Weight</b>	6 kg	6 kg	2 kg
<b>Computer</b>	Integrated	Integrated	External
<b>Battery</b>	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 7/8/10/11 (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, 8 GB  
**Hard Drive:** 1 TB or higher 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  
**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 K202742  
 Additional country-specific approvals