

# 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!

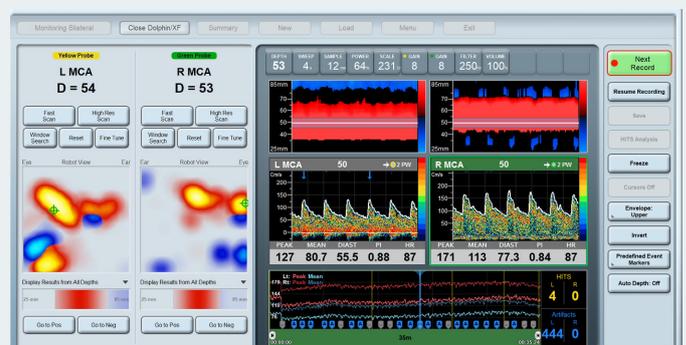


The *Dolphin/XF* TCD Robot Quickly scans the cerebral circulation and automatically assists in identifying blood flow velocities on the right and left sides of the brain. Using the *Dolphin/XF* is fast, simple and stable. Ideal for monitoring in the ICU, OR, and TCD lab, and for a range of specialty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

### *Dolphin/XF* Selected Features:

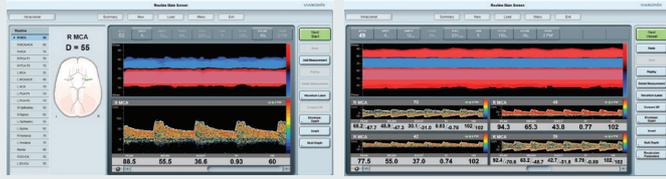
- ✓ Comfortable Fabric Headset
- ✓ Automatic Bilateral Scan
- ✓ Auto Search along the Ultrasound Beam
- ✓ Position Memory and Maximum Position Accuracy
- ✓ Scan Across all Depths
- ✓ "Heat Maps" Identifying Cerebral Vessels
- ✓ Simple and Intuitive User Interface
- ✓ Disposable Headset
- ✓ Fast Scan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

### Robotic Bilateral Scan



## 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. Viasonix is focused on Doppler and blood flow applications, which provide dedicated clinical solutions primarily for vascular and angiology departments, as well as neurology and neurosurgery settings. The user interface of the Falcon and Dolphin product lines is internationally renowned, and we invite you to discover and experience our extremely user-friendly products.

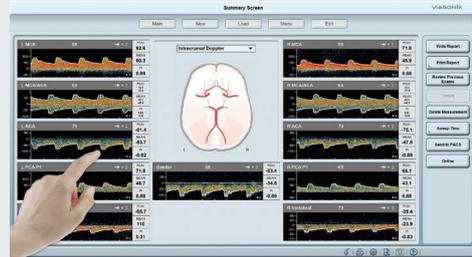


### Highly Advanced Doppler Processing

- ✓ 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

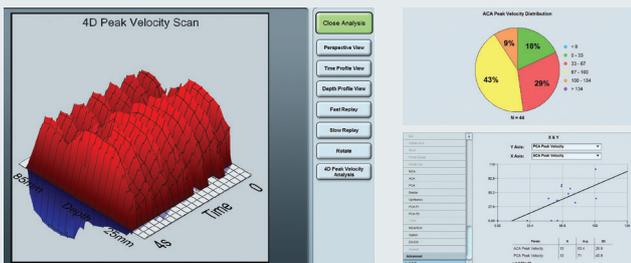
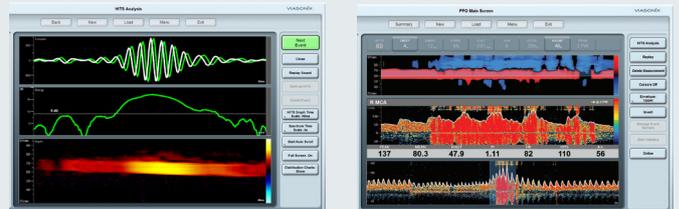


### Complete Network Solution

- ✓ **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**

## Selected Dolphin Accessories

### Range of Doppler Probes



### Monitoring Headset



### External Channels Connection Box



### Wired and Wireless Remote controls

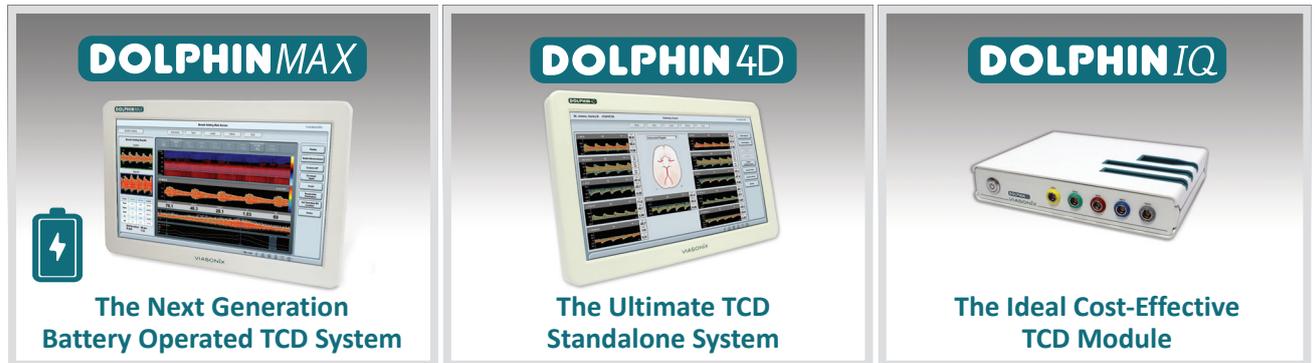


Foot Switch



Optional Stand

# Dolphin Specifications



## DOLPHIN MAX

**The Next Generation Battery Operated TCD System**

## DOLPHIN 4D

**The Ultimate TCD Standalone System**

## DOLPHIN IQ

**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 11 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