

# NEUROVASKULÄRE DIAGNOSE UND ÜBERWACHUNG

# WAKle



Neue  
Generation  
mit  
robotisierten  
Sonden

## TRANSKRANIELLER DOPPLER DER SPITZENKLASSE

- Hochmodernes Design
  - Vielseitig
  - Tragbar
- Einfache Handhabung

 **Atys**  
medical



**WAKle bietet alle erwarteten Eigenschaften einer effektiven und hochwertigen Transkranialen Doppler als M-Mode-Anzeige, Multi-Gating, Embolie Erkennung und Up-to-Date Anschlussfähigkeit.**

- Vasomotor reactivity test
- Breath holding, hyper ventilation

#### Jederseitige Prüfung möglich mit optimierten Einstellungen

- Fully operator oriented
- Dedicated preset-driven configurations
- User-defined protocols

#### Optimierte Scan-Zeit

The scan time is optimized thanks to the acquisition of all Doppler signals along the ultrasound beam. A single signal acquisition can display 9 spectra on 9 different depths. The operator identifies quickly the relevant depth and focuses on it. These 9 spectra can also be recorded for their offline review. Even when the examination is over, the depth of the Doppler signal can be changed and the exam report updated. Doppler parameters can be adjusted offline too for an optimisation of the saved signal.

#### Hervorragendes Monitoring-Modul

- User defined display
- On trend display, deviations are apparent at a glance
- Automatic and manual event markers
- Unique past event display function.

While the monitoring is under progress, with a simple touch of a key, you can go back in time and display any of the detected events or HITS. During this display, the monitoring still goes one.

#### Robotisierte Sonden

The adjustment of probe orientation is robotized.

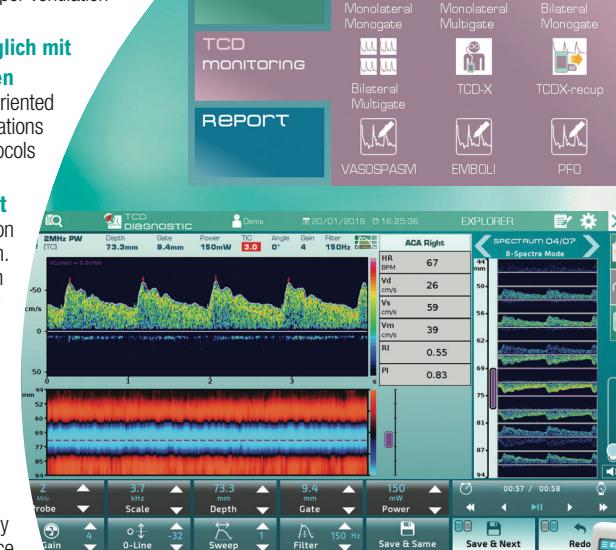
- It is far easier to find the TCD signal
- Automatic adjustment when the signal becomes weaker during recording: good signal conservation over several hours

#### Und/Oder Konventionelle Sonden



#### Entwickelt für eine Vielzahl von Anwendungen

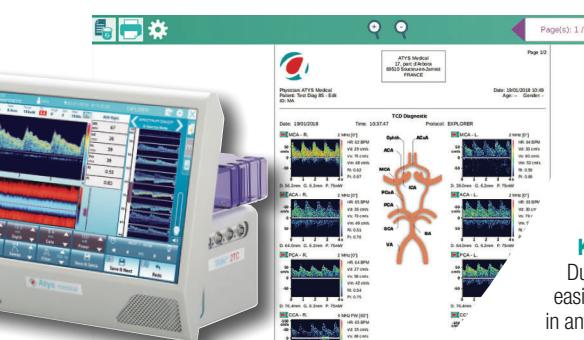
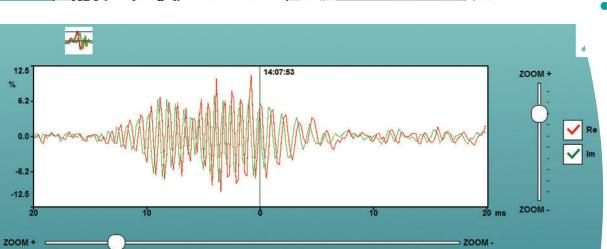
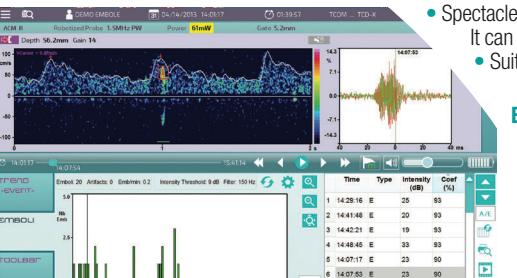
- Vasospasm
- Brain death
- Stenosis
- Sickle cell disease
- Collateral capacity
- Head trauma
- Cerebral perfusion
- Emboli detection
- PFO
- Vasomotor reactivity test
- Breath holding, hyper ventilation



#### Auswahl an Kopfsets, die allen Anforderungen gerecht werden und den Komfort verbessern

Conventional headframe.

- Spectacle frame. This probe holder is especially light, comfortable and stable. It can be withstood without any pain for several hours.
- Suitable for both awake or anaesthetized patients.



#### Embolie Erkennung

This module is purely developed to detect the emboli which are seen in TIA & stroke patients. It identifies high intensity transient signals (HITS) and classifies them into either an embolus or an artefact.

It is designed to provide the clinicians with fast, fully automated data for their analysis and interpretation.

- Detection intensity threshold can be chosen by the user
- Automatic emboli listing with confidence coefficient makes the identification of the most significant emboli easier and faster
- Emboli review mode: HITS spectrum and sound playback, audiogram display

#### Berichte

**WAKle** erstellt saubere, umfassende und anpassbare Berichte für Diagnose und Überwachung.

#### Batterie Autonomie

While delivering the functionality of a full-fledged transcranial Doppler, **WAKle** can be powered not only by the mains but also by a battery. This impressive feature helps the clinicians to adapt to new challenges.

- Outside, in accident sites
- No time lost for boot when moved from one bed to the other

#### Kompakte Grösse und Tragbarkeit

Due to its lightness, reduced size, built-in handle, **WAKle** can be easily and quickly taken wherever transcranial Doppler is needed in any hospital department and even on accident sites.

- |                       |   |
|-----------------------|---|
| Diagnosis             | • |
| Unilateral monitoring | • |
| Bilateral monitoring  | • |
| Robotized             | • |

- |           |   |
|-----------|---|
| WAKle TCD | • |
| WAKle 1TC | • |
| WAKle 2TC | • |

Monitoring always includes emboli detection, vasomotor reactivity tests



## Produktspezifikationen

Ausgestattet mit der neuesten Technologie, die die Prüfung erleichtern und Zeit ersparen

### Benutzer-oberfläche

- Touch screen
- Virtual keyboard
- Alphanumeric keyboard
- Remote control
- Foot switch pedal



### Protokolle

- For diagnosis and monitoring
- Easily configurable Unlimited number

### Berichte

- Customizable personalized reports
- Templates
- Measurement result table
- Hospital logos
- Patient pictures
- User and physician comments

### Exportieren von Daten

- Report: PDF, ODT, PNG, DICOM
- Trends and envelops: Excel (txt), analog
- Raw data, wave
- MP4

### Kontinuierliche Überwachung

- 1 or 2 channels
- Parameter trend graph
- Alerts, automatic & manual markers

### Angezeigte Indizene

- Vs, Vd, Vm, PI, RI, Vs/Vd, Lindegaard index, Systolic/Diastolic ratio, Mean flow, Peak flow, Average



### Embolie-Erkennung

- Display of the emboli features: intensity, energy, duration, velocity, side, position in the heart cycle, confidence coefficient.
- Customizable sorting of the emboli
- Embolii distribution chart
- Audiogram (complex) display
- Easy playback of the emboli
- Embolii can be shown in the report

### Spezielle Tests

- Auto regulation
- Breath holding
- Vasomotor reactivity
- Configurable thresholds
- Special report layout with trends
- On screen trends for easier tracking

### Überprüfung des Exames

- Unlimited number of review stations
- Replay examinations with full spectrum and Doppler audio
- Complete shared network database
- Reanalyse and add interpretations to a finalized report

### Allgemeine Spezifikationen

- Mains power: 110-240 V, 50-60 Hz
- Internal battery
- Dimensions (cm): 37.6 x 28.4 x 20.1
- Weight (kg): 5.2
- Portable (all in one device)
- Dedicated carrying bag
- Trolley
- On line help
- Remote access to the WAKle in real time from your office

### Hochwertige Doppler

- Fully digital Doppler
- High resolution colour M-mode
- M-mode supported by each probe
- Multi-gating: simultaneous display of 9 spectra along the ultrasound beam
- Visual and audio replay at any depth
- Offline post processing of depth
- Each connector can support each probe
- Probe frequency (MHz): 1.6, 2, 16 (PW), 4, 8 (PW/CW)
- 1 or 2 channels
- Each channel supports each probe
- Stereo speakers

### Sonden-Optionen

- 2 MHz handheld probe
- 1.6 MHz handheld probe
- 2 MHz monitoring probe
- 1.6 MHz monitoring probe
- 2 MHz robotized monitoring probe
- 1.6 MHz robotized monitoring probe
- 16 MHz probe
- 4 MHz handheld probe
- 8 MHz handheld probe

### Sondenhalter (für die Überwachung)

Uni- or bilateral headframe Spectacle frames for robotized probes

### Bildschirm

- Built in 15" (16/9) WXGA colour
- Resolution: 1360x768
- Touch screen

### Computer

- OS: Linux
- RAM: 4 GB or higher
- Hard disk or SSD

### Anschlussmöglichkeiten

- 5 USB ports
- 1 HDMI output
- 1 VGA output
- Headphone connector
- Analog input (4)/output (8)
- DICOM (worklist, storage)

Wir haben ein offenes Ohr für Ihre Bedürfnisse und arbeiten jeden Tag daran, Ihnen die fortschrittlichsten Technologien und das innovativste Design zur Verfügung zu stellen, damit Sie in der Patientenversorgung Spitzenleistungen erbringen können.



**Neuro Medical**

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