TOFscan®
Neuromuscular transmission monitor

TOFscan® is a nerve stimulator module for the measurement of neuromuscular transmission, via accelerometry. It provides an easy, accurate way to measure of patient muscle relaxation. TOFscan® supports evidence-based judgment about the state of a patient’s neuromuscular blockade.
Benefits

Ergonomic design
The sensor is ergonomically designed for intuitive and optimal positioning throughout the monitoring period.

- Three-dimensional accelerometer sensor
- Adjustable stimulation current (20 – 60 mA)
- Automatic switch off
- Operates on batteries or with AC power supply
- Audible messages (can be switched off)
- Mounting clamp for medical stand (10 – 60 mm / 0.4 – 23 inches)
- Clear display of information for immediate use
- No sensor calibration required

Flexible use
TOFscan is a simple device to use. Since the device can operate on batteries as well as with the AC power supply it can be set up without the need for a power cable and easily moved into place. The mounting clamp allows optimal positioning on a pole or bedrail.

Easy and robust handling
The screen shape and single button selection have been designed with simplicity and ergonomics in mind. And although the TOFscan enables a simple and objective monitoring of the neuromuscular junction, it is designed as an operational medical device to be tough, reliable and practical.
System components

Infinity® Acute Care System

Transform your clinical workflow with the Infinity® Acute Care System monitoring solution. This innovative two-screen solution opens the door to a new dimension of patient mobility, connectivity and configurability – providing for the seamless transition of the patient and their information with a single monitor that travels with the patient throughout the care path.

Accessories

Hand sensor with cable

A 3D accelerometer sensor to measure the real thumb movement. The result is a complete measurement with advanced accuracy under numerous clinical conditions. No additional calibration needed. The sensor (encased in a splint) is ergonomically designed for correct and optimal positioning. Intuitive and hassle-free.

Extension Cable 1.8 m (5.9 ft)

With the extension cable you can use the TOFscan® in surgical situations that require more flexibility.
Accessories

Optical cable

TOFscan® uses an optical cable to transfer data.

Mountings

Mounting for pole or bedrail.

Related products

Zeus® Infinity® Empowered

Combine the complete spectrum of ventilation therapy with unparalleled monitoring, automation, workflow and information management technology with Dräger’s most advanced anaesthesia workstation.
Related products

**Dräger Perseus® A500**
Combine proven ventilation technology with the latest refinements in ergonomics and systems integration with an advanced anaesthesia platform designed together with experts from around the world to streamline your anaesthesia workflow.

**Primus Infinity® Empowered**
Take performance, reliability, workflow and information management to the next level with one of the most advanced integrated anaesthesia solutions on the market today.

**Dräger Evita® Infinity® V500 ventilator**
Combine fully-featured, high-performance ventilation with Infinity® Acute Care System™ integration to meet the challenges of today’s health care environment.
Technical data (TOFscan®)

Safety
Compliant with European directive CEE 93/42
Compliant with standards EN 60601-1 Jan. 2007 and EN 60601-2-10
EC marking (CE0499 SNCH 2014-10-02) for Class 2a device
EMC Class A
Material sensor clamp (part in contact with the patient) THERMOLAST® M TM4MED (free Latex)

Stimulations
TOF (Train Of Four), T1/T4 and Tref/T4 calculations
AUTO TOF (Tof programmed from 15s to 15min)
TET (Tetanus 50 Hz)
DBS* (Double Burst Stimulation) modes 3.3, 3.2 and 2.3
PTC* (Post Tetanic Count)
TWITCH (Single Twitch) 0.1 Hz and 1 Hz

Acceleration detector
Three-dimensional accelerometer (±8 G at 10 bits, Fq: 200 Hz, Resolution 0.016 G)

Electrical stimulation
Constant output current of 0 to 60 mA (accuracy ±10 %) (on an actual load of 4 Kohms)
Monophasic, duration of impulse 200 μs, frequency 50 Hz

Power supply
2,000 mAh Lithium-Ion battery (comes with thermal protection and protection against short-circuits)
Battery power for about one month with normal use (10 TOF measurements a day)
Charger/External power supply (continuous 5V 1,000 mA)

Dimensions/Weight
Monitor alone 60 x 150 x 55 mm (2.36 x 5.9 x 2.16 in)
Monitor with accelerator battery and cables and electrode 320 g (0.7 lb) (approximately)
excluding cable 190 g (0.41 lb)

Ordering Information (TOFscan®)

TOFscan® monitor MS32146
Extension cable MS32153
Hand sensor with electrode connector, adult MS32154
Hand sensor with electrode connector, pediatric MS22289
Optic serial RS 232 cable (1 meter) MS32156
To connect the device to a Dräger monitor
AC Charger (Europe) MS32147
AC Charger (UK) MS32148
AC Charger (US) MS32149
Mount clamp 10 – 40 mm (0.4 – 1.57 in) MS32150
Mount clamp 25 – 68 mm (0.99 – 2.36 in) MS32151
TOFscan® to IACS connectivity kit MS25836

* These parameters are not displayed on IACS cockpit when the device is interfaced.
Not all devices depicted are available in every country.
Notes