

EP-TRACER[®] 2 Portable

The portable electrophysiological measurement system with a fully-integrated stimulator

**schwarzer
cardiotek**
SMART. PRECISE. RELIABLE.



The EP-TRACER 2* with its fully-integrated stimulator can be used for clinical EP studies. A single device and a standard protocol allows investigations to be carried out in any laboratory.

The entire EP system is operated with a laptop which fits comfortably into a rolling suitcase, thus providing the first fully featured portable EP system in the world. The system can also be connected to a high resolution monitor and a laser printer to facilitate operation in a hospital environment.



* EP-TRACER with software version 2

Features of the EP-TRACER 2 Portable

Amplifier

EP-TRACER 2 amplifiers offer the connection of either 20, 52 or 84 intracardiac channels. All amplifier models allow connection of 12 surface ECG channels and 6 auxiliary channels which, for example, can be used for the measurement of invasive blood pressure.

Integrated Stimulator

The EP-TRACER 2 is equipped with a built-in 2-channel stimulator. The software allows stimulation on any intracardiac channel with the click of the mouse, without further external wiring or equipment. Stimulation protocols are easily customized and accessed, thus further streamlining the procedural workflow.

Software

The EP-TRACER 2 software provides an intuitive interface that supports your requirements at every stage of the procedure.

Special display modes, such as triggered mode, pressure mode and multiple user-configurable split-screen modes provide the perfect framework to display data from multiple sources. For example, surface and intracardiac ECG signals, invasive blood pressure, as well as ablation data (RF- and cryo-ablators supported) can all be displayed within your customized layout.

One-touch commands to start/stop stimulation, decrement interval time, load a saved stimulation protocol, save events, add comments etc., allows for the seamless operation of the EP-TRACER within your preferred workflow.

All events are time-stamped and added to the user-customizable procedure log to facilitate reporting and later review from anywhere in the hospital network using our specialized review software.



Further Features

- New Export tool for the export of calibrated trace values (in mV)
- One-click report generation: Customizable Report templates allow for a maximum of reporting flexibility
- Well-visible presentation of annotations and measurements within a recording
- Automated detection of connected abulators (RF- and cryo-ablators)
- Icon-based operation: Pin-drop, Screenshot and AutoText features for rapid procedural annotation and streamlined reporting
- Measurement of invasive blood pressure (IBP) to better determine the catheter position during transseptal puncture.

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Components

- EP-TRACER 2 Portable
 - Laptop (Windows 10 IoT, 64bit)
- Software EP-TRACER 2
 - Recording software
 - Instruction manual
 - Review software
 - Dongle license key
- EP-amplifier
 - 20, 52 or 84 intracardiac channels
 - 12 surface ECG channels
 - 6 auxiliary channels, e.g. for the invasive measurement of blood pressure
 - Integrated stimulator with 2 outputs
 - Allows custom stimulation via intracardiac channels without external wiring
 - Input mode: bipolar or unipolar
 - Isolated power supply
- Catheter connection boxes
- Power-box, 100-240 V
- Filter set with EP-TRACER 2 70 and 102
- Cabeling
 - Cable for catheter connection box (approx. 3 m)
 - ECG cable with electrodes
 - Carbon-fiber cable RTBG-3605, L = 90 cm

Technical details

Medical device directive (93/42/EEC)	Class IIb
EP-TRACER 2	
Intracardiac channels	20/52/84
Sampling rate	1 kHz per channel
Amplification factor	0.1 – 25
Catheter connection box	2/4/6 × DIN DB25
	Input modes: bipolar and unipolar
ECG channels	Electrode connections: R, L, F, N, C1-C6 Standard: DIN DB15 Leads I, II, III, aVL, aVR, aVF C1-C6 Calibration equivalent to 1 mV
Additional channels	6 AUX channels Connections: 3 × 9 pin REDEL (2 channels per connection) Input mode: bipolar
Current leakage	< 50 µA
Back-up stimulation mode	60 beats per min at Out1-Out2 simultaneously current = 8 mA (Out1) current = 4 mA (Out2) pulse width = 2 msec
Stimulator	Current 0 – 25.5mA (customizable) Minimum increment 0.1 mA Maximum output-voltage: 20 V
Analog/digital converter	Resolution: 12 bit (20 bit dynamic) Bit weight: 1.25 µV/ LSB
Computer operating system	Windows 10 IoT, 64bit
Applicable standards	IEC 60601-1:2005 + A1:2012 / IEC 60601-1-2: 2014 IEC 60601-1-6: 2010 + A1:2013 IEC 60601-2-27: 2011 / IEC 60601-2-34: 2011 IEC 62366: 2007 + A1:2014 / IEC 62304: 2006
Patient safety	Safety class I, type CF according to IEC 60601-1; Patient connections protected against the effects of defibrillation impulses
Dimensions (h × w × d)	
Portable system in aluminium suitcase	150 × 460 × 370 mm
EP-TRACER 2 38/70/102	60 × 280 × 270 mm / 110 × 290 × 260 mm / 110 × 290 × 260 mm
Weight	
Portable system in aluminium suitcase *	approx. 10 kg
EP-TRACER 2 38/70/102	approx. 2.2 kg / 3.3 kg / 3.8 kg
Labelling	
only for EP-TRACER 2 medical device	CE 0197

Notice: The EP-TRACER Portable version is sold as a system pack while the main device, EP-TRACER, is a CE marked medical device of class IIB. Content may be subject to change. * only for EP-TRACER 2 38