

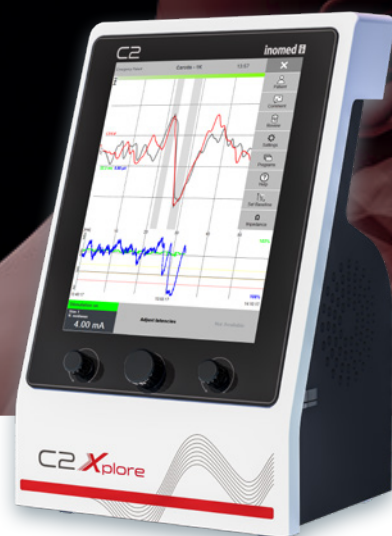
SEP

Somatosensory evoked potentials



APPLICATION FIELD

Vascular surgery
Carotid artery



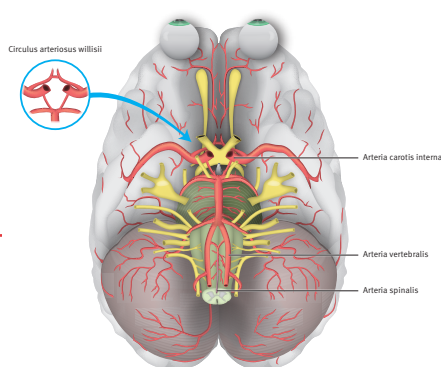
C2 **Xplore**

One step ahead in IONM

Neuromonitoring in carotid artery surgery

Detection of changes of the cortical blood supply during surgery in time

inomed provides the C2 Xplore with its special C2 SEP software module for efficient neuromonitoring during carotid artery surgery. Due to its high signal quality and user-friendly operation, the C2 Xplore is already being used in a large variety of surgical disciplines.



SEP monitoring during carotid artery surgery shows beginning of cerebral ischaemia

During carotid artery surgery, recording of somatosensory evoked potentials (SEPs) is recommended for monitoring neuronal electrical activity. It helps detect inadequate blood supply to the brain hemispheres. If the SEP amplitude changes while the carotid artery is clamped, it can be an indication of ischaemia. An 50% amplitude reduction in comparison to the baseline amplitude prior to clamping is considered a sign that ischaemia is occurring.¹

¹ Wiss. Arbeitskreisen Kardioanästhesie und Neuroanästhesie - Neuromonitoring in der Kardioanästhesie. Eine gemeinsame Stellungnahme der DGAI, SGAR und DGTHG, Anästh Intensivmed 2014; 55: 521-538.

Features

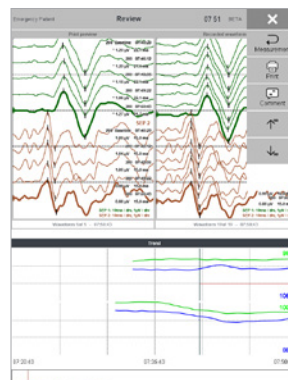
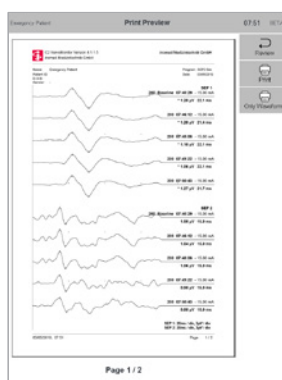
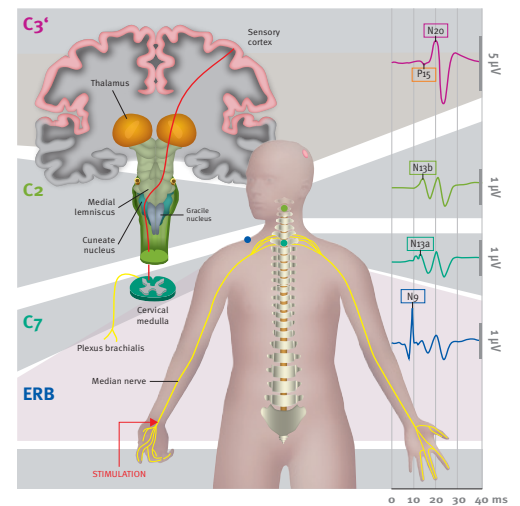
- Specially developed software for SEP testing
- Clear view of SEP signals
- Floating averaging process
- Intuitive display of averages
- Configurable warning thresholds for latency and amplitude changes
- Integrated database
- Easy-to-use
- Continuous and automated impedance monitoring for the measuring electrodes
- 2D LED scanner for patient data





Measurement mode

Sensory function is continuously monitored during recording. Stimulation electrodes are placed on the median nerve. The stimulation is performed contralaterally to the operation site. Signals are recorded from the sensory cortex on the operation site. A comparison measurement at the level of the cervical vertebrae C7 can also be useful. During the entire surgical procedure, latency and amplitude of the recorded SEP signals are displayed in a trend window. If the measured values reach one out of three adjustable threshold values, the surgeon is notified: yellow, orange and red signals indicate the threshold levels, supported by sounds. The surgeon can now react accordingly, e.g. by placing a shunt, in order to prevent irreversible damage.

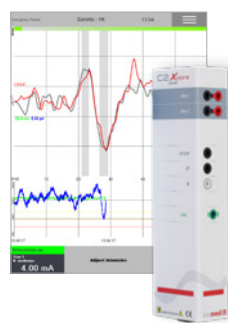


Documentation

Thanks to the intuitive comment function of the C2 SEP software, the relevant events (for clamping, declamping) can be controlled at any time, also retrospectively.



Art. No. **508 288**
C2 Xplore
for intraoperative nerve
monitoring. Easy to use EMG
monitor with two integrated
stimulation channels,
loudspeaker, footswitch and
mains lead



Art. No. **508 452**
Application package SEP
consisting of software license
“SEP”, SEP Box and license for
4-Channel recording

Art. No. **510 025**
Mute sensor
to suppress HF interference signals,
cable length 5 m
› Delivered non-sterile
› Disinfectable



› STIMULATION

Art. No. **533 657**



SDN electrodes RD/BK 20/2000, stainless steel
1.5 mm touchproof connector, pair of electrodes red/black,
needle length 20 mm, diameter 0.45 mm, cable length 2 m
› single-use only
› EO sterilized

› RECORDING

1 channel set for 30 surgeries

1x Art. No. **530 750**,
3x Art. No. **533 651**



Art. No. **530 750**
Corkscrew Electrode Set
spiral needle 0.6 mm with tip,
cable 1 m
with 1.5 mm touchproof male
connector DIN4280,
10 sterile sets with each 6
electrodes red, green, yellow,
blue, black and white
› single-use only
› EO sterilized

2 channel set for 30 surgeries

1x Art. No. **530 750**,
3x Art. No. **533 623**,
3x Art. No. **533 651**

Art. No. **530 750**
Corkscrew Electrode Set

Art. No. **533 651**
SDN Electrode

Art. No. **533 623**
SDN electrode YE
15/1000, stainless steel
1.5 mm touchproof connector,
1 electrode yellow, needle length
15 mm, diameter 0.45 mm, cable
length 1 m
› single-use only
› EO sterilized



Art. No. **533 651**
SDN electrode GN
20/1500, stainless steel
1.5 mm touchproof connector,
1 electrode green (Ground),
needle length 20 mm,
diameter 0.45 mm,
cable length 1.5 m
› single-use only
› EO sterilized

