Clinical application

R	NCC Electrophysiology
	Electrophysiology

Department	Surgeries	Main risks	Suggested monitoring modules
	Cervical spine surgery	Spinal cord injury (high paraplegia) Nerve root injury (poor postoperative recovery) Safety of screw implantation	SEP+MEP+EMG+Trigger EMG+Pedicle Screw+TOF
	Thoracolumbar spine surgery	Spinal cord injury (risk of paralysis below the brachial plexus, with impairment of urination and excrement function) Nerve root injury (poor postoperative recovery) Safety of screw implantation	SEP+MEP+EMG+Trigger EMG+Pedicle Screw+TOF
Orthopedics	Coccyx surgery	Spinal cord injury (risk of paralysis below the brachial plexus, with impairment of urination and excrement function) Nerve root injury (poor postoperative recovery) Safety of screw implantation	SEP+MEP+EMG+Trigger EMG+- Pedicle Screw+TOF+BCR+ H reflex
	Scoliosis correction surgery	Spinal cord injury (high paraplegia) Nerve root injury (poor postoperative recovery) Safety of screw implantation	SEP+MEP+EMG+Trigger EMG+- Pedicle Screw+TOF
		Free EMG+Trigger EMG+L- SR+SSEP+BAEP	
	Hypophysoma	Optic nerve injury Monitoring visual evoked potentials	VEP+ Free EMG+TriggerEMG
	Carotid endarterectomy	Irreversible motor dysfunction caused by ischemia Monitoring vascular perfusion	SSEP+Tce MEP+EEG
Neurosurgery	Cerebellar pontine area	Facial nerve damage (facial paralysis) Acoustic nerve injury (hearing loss) Exploration and confirmation of the facial nerve	Free EMG +Trigger- EMG+BAEP+SSEP+Facial MEP
	Functional area tumor	Motor dysfunction Aphasia Localization of functional areas	TceMep+SSEP+ Free EMG +EEG+Motor Mapping
	Arterial aneurysm	Irreversible motor dysfunction caused by ischemia Monitoring vascular perfusion	SSEP+TceMEP+EEG
	Intramedullary tumor	Spinal cord conduction dysfunction (motor, sensory) Spinal nerve roots injury Monitoring screw implantation	SSEP+TceMEP+Free EMG+Trig- ger EMG+PedicleScrew+BCR

IONM System



For more, please contact us:

Diagnostic: EEG, EMG

Surgical monitoring: Cynapse IONM, Smart IONM

Rehabilitation: Biofeedback system, Micro-current stimulator, Surface EMG system





Product features



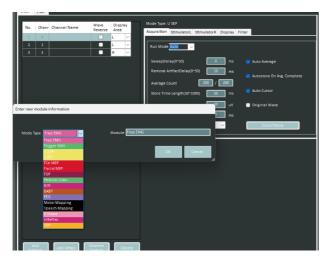


▲ Improve monitoring efficiency by displaying multiple monitoring devices, easily switchable, on the same screen

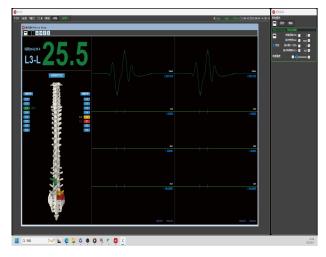
▲ 16/32 channels

Free EMG U SEP L SEP TCe MEP TOP			
	Template Name	Procedure Module	
	Aneurysm	Free EMG/U SEP/L SEP/TCe MEP/TOF	
1	Cerebellopontine Angl	Free EMG/Trigger EMG/U SEP/Facial MEP/BAEP	
	Cervical Spine	Free EMG/Trigger EMG/U SEP/L SEP/TCe MEP/TOF	
1	Functional Area+Centr	Free EMG/Trigger EMG/U SEP/L SEP/TCe MEP/TOF/Motor	
	Lumbosacral Vertebrae	Free EMG/Trigger EMG/U SEP/L SEP/TCe MEP/Pedicle S	
	Microvascular Decompr	Free EMG/Trigger EMG/Trigger EMG/BAEP	
1	Scoliosis(16 Channels)	Free EMG/Trigger EMG/U SEP/L SEP/TCe MEP/TOF/Pedic	
	Thoracolumbar	Free EMG/Trigger EMG/U SEP/L SEP/TCe MEP/TOF/Pedic	

▲ Some templates already set up in system



▲ Multi-module integrated monitoring, suitable for different clinical applications



◄ Introducing the Automatic Pedicle Screw Monitoring Module designed to ensure safe and accurate placement of pedicle screws during surgery by automatically increasing the pedicle probing current and stopping when reaching the threshold without any manual intervention, helping to monitor whether the pedicle wall has been penetrated or not and alert the surgeon to avoid damaging adjoining nerve roots

- Integrated design for consumables offering a complete solution with one connection, reducing error rate
- Easy to connect the corresponding labeled consumables, even for new users
- Integrated consumables possessing a robust anti-interference capability, enhancing waveform accuracy





Disposable subdermal needle electrode

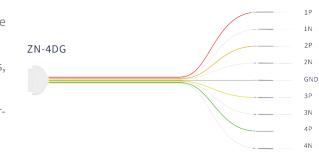
Disposable corkscrew needle electrode



Portable version

- Portable suitcase design, storing all accessories in one suitcase
- Convenient for transportation between hospitals
- Flexible configuration of trolleys to meet various usage scenarios

Special consumables





Dual screen with trolley

• The entire system connected by a single wire, reducing error rates and improving efficiency by saving time required for preoperative preparation

• Minimized wear and tear of the device

• Adjustable dual screens with a main screen and an extended screen, with back-to-back mode allowing surgeons to view monitoring results directly, and compatible with an external microscope for more pre-cise monitoring

