



The 1st Handheld Multi-Sensor NMT Monitoring System and Now with Upgraded Features

The **Simple, Economical** and **Complete** Solution for **Quantitative NMT Monitoring** in the **OR, PACU, ICU & VET**



STIMPOD
NMS 450 X+

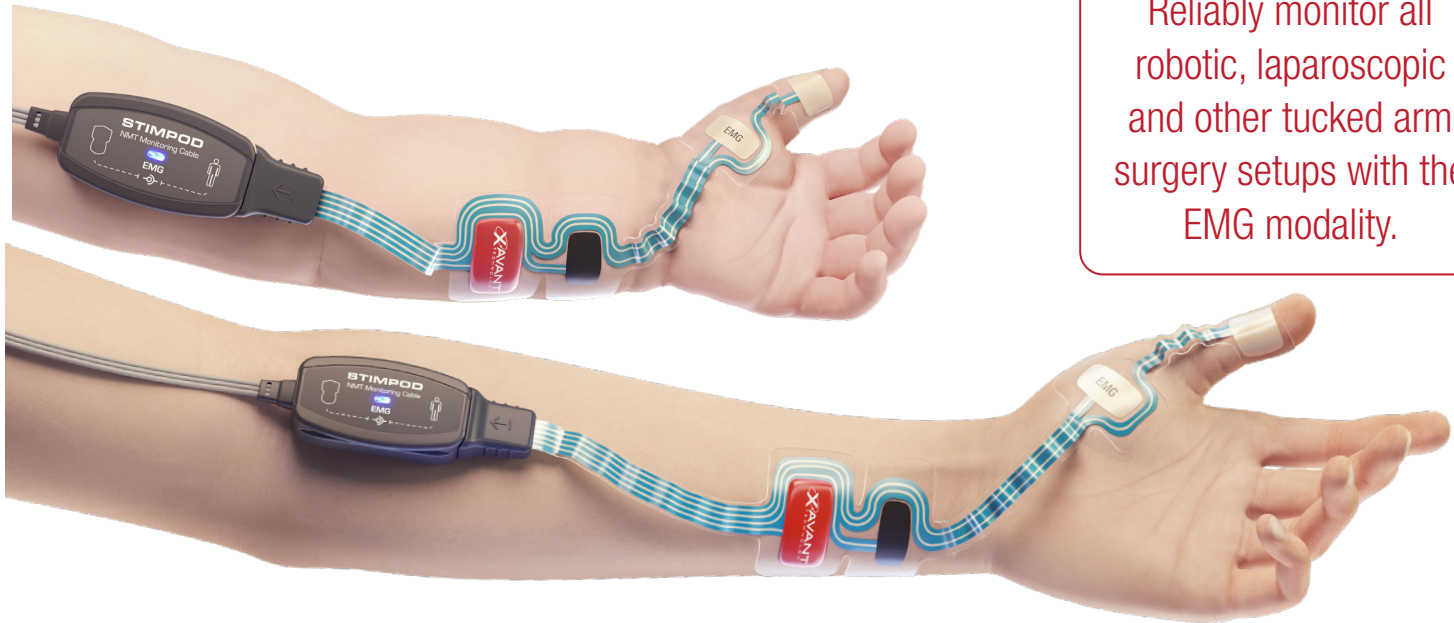
FDA CE
APPROVED 1639

XM400-122EN10-03

EMG ELECTROMYOGRAPHY

ULTRA-FLEXIBLE EMG ELECTRODE FOR RELIABLE NMT MONITORING

The patented ripple design allows the electrode to fit on either the left or right hand and accommodate any hand size. The soft, dermatoid material allows for maximum adhesion during long surgeries with multiple patient movements for uninterrupted NMT monitoring.



TUCKED ARMS

Reliably monitor all robotic, laparoscopic and other tucked arm surgery setups with the EMG modality.

ADVANCED EMG DETECTION TECHNOLOGY

The EMG processing utilizes both Peak-to-Peak and Area Under the Curve (AUC) detection methods, ensuring highly accurate and sensitive NMT response detection. By combining these methods, our EMG system delivers superior performance across a wide range of clinical conditions, providing a complete and unmatched EMG solution.

THE PERFECT PARTNER FOR ROBOTIC SURGERY

The EMG technology allows for neuromuscular blockade monitoring for any patient position.

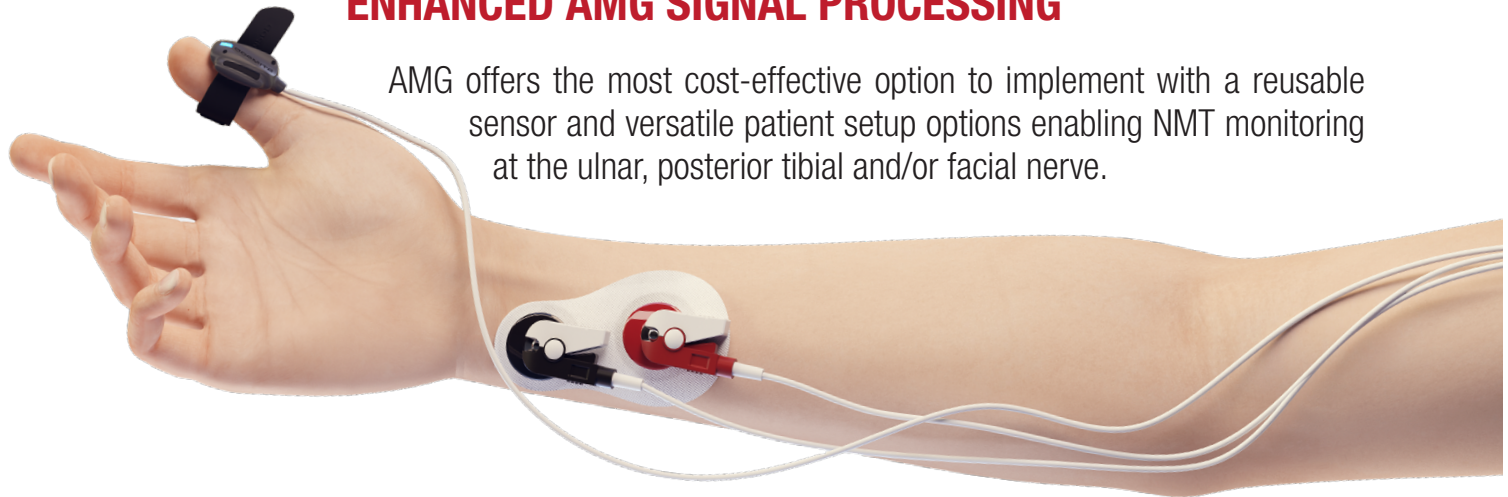
Overcome intra-operative patient inaccessibility concerns with the specialised electrode designed for long-lasting adhesion to the patient and continuous closed-circuit confirmation.



The only hand held neuromuscular blockade monitoring system available on the market that provide support for both AMG and EMG sensor technologies, enabling cost control at the point-of-care based on need and specific setting and allowing for affordable standardisation across the entire hospital.

AMG ACCELEROMYOGRAPHY

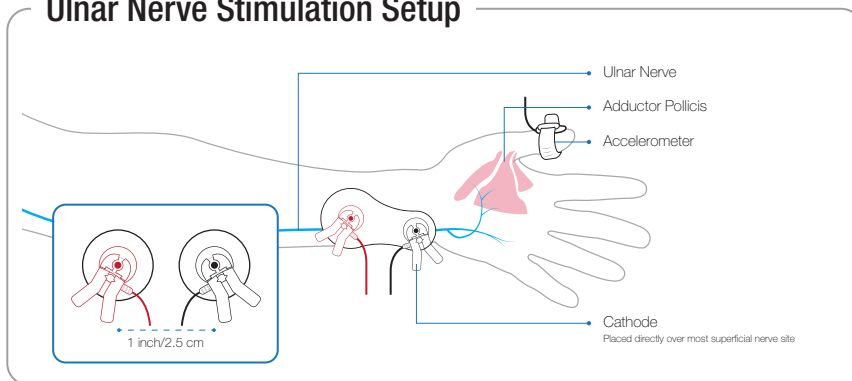
ENHANCED AMG SIGNAL PROCESSING



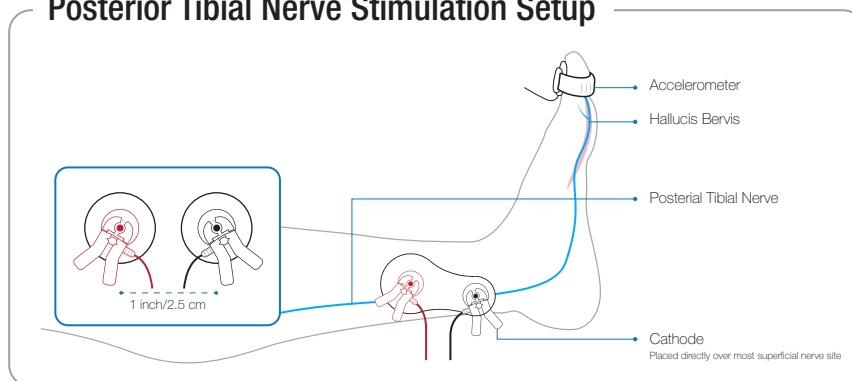
AMG offers the most cost-effective option to implement with a reusable sensor and versatile patient setup options enabling NMT monitoring at the ulnar, posterior tibial and/or facial nerve.

APPLICATION MODE

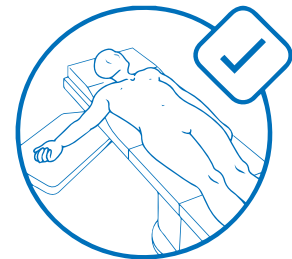
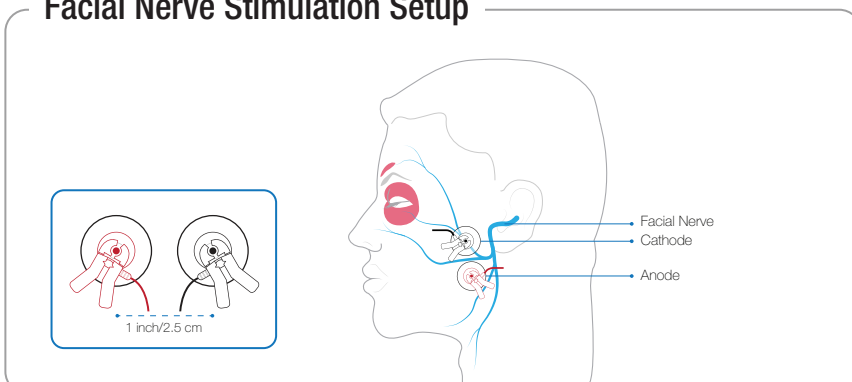
Ulnar Nerve Stimulation Setup



Posterior Tibial Nerve Stimulation Setup



Facial Nerve Stimulation Setup



OPEN ARM

Use the cost-effective re-usable AMG technology for TOF monitoring during open arm surgery setups.

MAXIMIZE THE VALUE OF YOUR STIMPOD WITH X-LINK

EMR INTEGRATION

Seamlessly transmit patient data by securely automating connectivity to your hospital's EMR system. The X-Link connects directly to your hospital network, eliminating the need for third-party hardware or software, thus reducing implementation time and cost. With minimal setup, your hospital can benefit from real-time data transfer, improved patient care, enhanced data security, and workflow efficiency, all within your existing network infrastructure.

ENHANCING THE STIMPOD

The X-Link boosts your STIMPOD's* performance with smart charging,** ensuring the device is always ready for use, extending battery life, and improving workflow efficiency. With plug-and-play connectivity, once connected, the X-Link integrates effortlessly with the existing STIMPOD, requiring no additional operator input.



MOUNTING OPTIONS

Designed with flexible mounting options, the X-Link adapts to different clinical environments, whether attached to an IV pole or mounted for a permanent setup.

OPEN INTERFACE

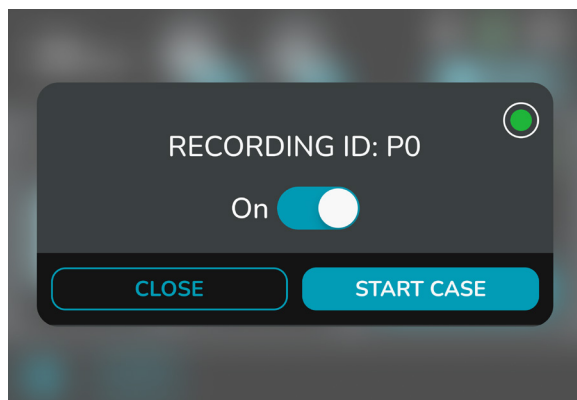
The X-Link aligns with our open interface commitment, fully supporting the Integrated Health Environment (IHE) by utilizing globally accepted communication standards such as HL7, FHIR, etc.

Unlock the full potential of your
STIMPOD with X-Link - enhancing
efficiency and reliability.



* Applicable STIMPOD Models: NMS450X and NMS450X+
** Smart charging only available on STIMPOD NMS450X+

NEW FEATURES OF THE STIMPOD NMS450X+

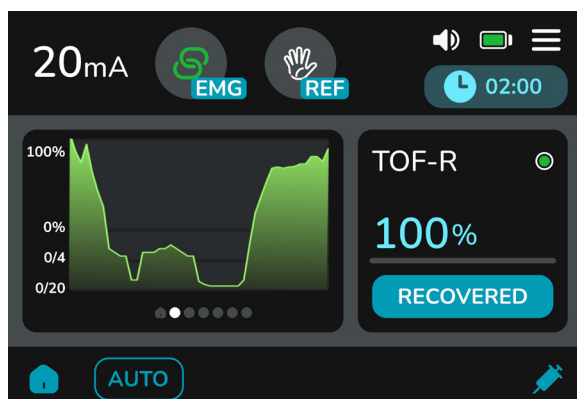
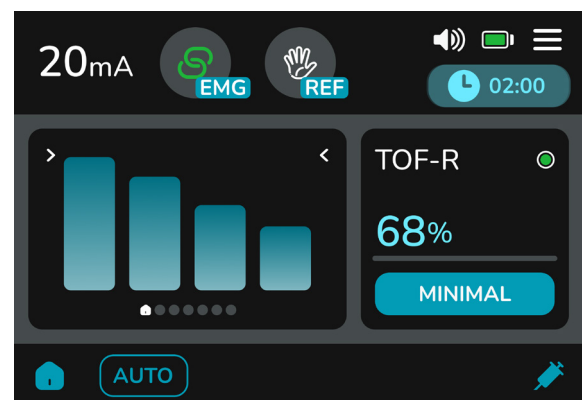


ONE TOUCH CASE MANAGEMENT

Pressing the “Start Case” button initiates automated case management

FULL COLOR TOUCH SCREEN

User-friendly interface, seamless interaction, and lightning-fast response times for effortless navigation and an enhanced user experience.

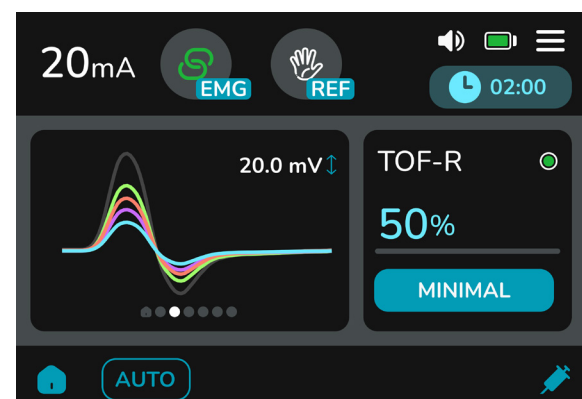


DEPTH OF BLOCK TREND GRAPH

Know your patients’ pharmacokinetic response over time to paralytics and reversal agents.

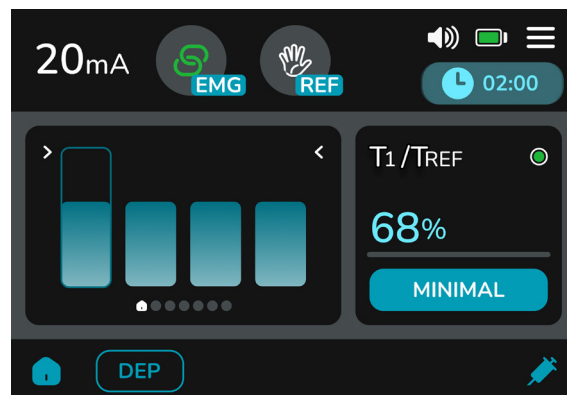
EMG WAVEFORMS

Enhance the quality of your data by reviewing the morphology of your EMG waveforms in realtime.



DEP MONITORING

Monitoring depolarising muscle relaxants using dedicated DEP Mode as recommended by the international guidelines.



< REC	< 8/10 >	🗑️
P0016	00h16m	Recovered
P0015	00h13m	Recovered
P0014	00h29m	Recovered
P0013	00h57m	Profound

SEAMLESS DATA RECORDING

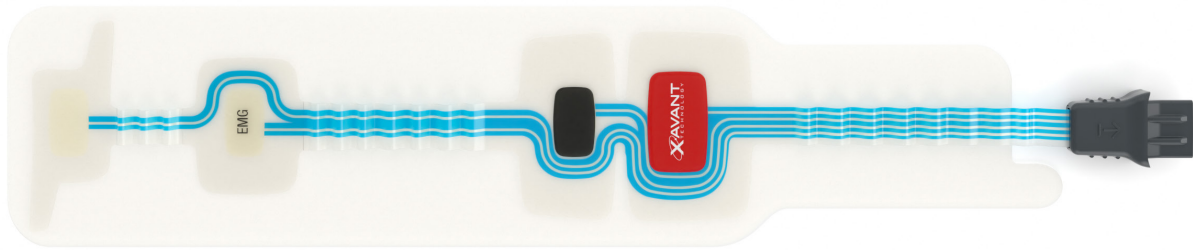
Realtime data recording available for download and integration into your EMR systems.

RECHARGEABLE BATTERY

The STIMPOD features a unique internally rechargeable and removable Li-ion battery that provides up to 40hrs continuous use.



| ACCESSORIES OF THE STIMPOD NMS450X+



EMG ELECTRODES

Experience unparalleled reliability with our patented ripple design EMG electrode. Specifically engineered to fit both left and right hands, it effortlessly accommodates any hand size. Our EMG Electrodes are designed to cater to both adult and paediatric. Crafted from soft, dermatoid material, it ensures maximum adhesion even during long surgeries with frequent patient movements, guaranteeing uninterrupted NMBA monitoring.

AMG ELECTRODES

The specially designed AMG electrode features a unique colour-coded cathode and anode in a single sticker. Versatile and adaptable, it can be applied to the hand, foot or face. The proprietary stimulation gel and gel interface significantly outperforms conventional Ag/AgCl ECG electrodes over long surgery times.



COMBINED NERVE MAPPING/ LOCATION CABLE

Auto sensing technology provides a solution for simultaneous nerve mapping and nerve location. The STIMPOD monitors whether the mapping probe or needle touches the patients and adjusts the current range, ensuring quick and precise nerve location.



| ACCESSORIES OF THE STIMPOD NMS450X+



EMG MONITORING CABLE



AMG MONITORING CABLE

Ensure uninterrupted NMBA monitoring with our high-quality, reusable EMG and AMG monitoring cables. Available in 1.8m or 3.5m lengths, they provide flexibility and convenience. With exceptional durability, guaranteeing reliable and consistent signal transmission for accurate monitoring throughout procedures.

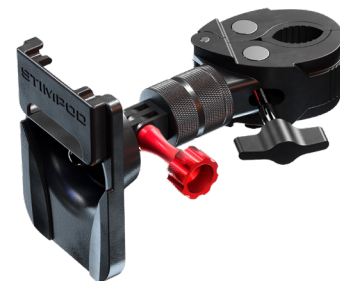
SMART DATA CABLE

The smart data cable series allows for your NMT data to be displayed on 3rd party devices, as well as for EMR integration and remote software updates to your device.



INFINITY MOUNT

Secure your STIMPOD with our versatile Infinity Mount. With its 360 degree range of adjustments, it can be fixed anywhere for optimal positioning. It's easy to use mechanism adds convenience for healthcare professionals on the go.



POLYPROPYLENE CARRY CASE

Keep your STIMPOD safe and organized with our durable protective carry case. Designed with a customizable foam interior, it securely holds your device and accessories. Transport with confidence and ensure everything stays in place with our specially designed foam.



OVERVIEW

SIMPLE. ECONOMICAL. COMPLETE.

One Touch NMT™



Full case monitoring from electrode placement to extubation.

Quick Setup and No Calibration



Patient can be monitored on demand and/or continuously throughout the procedure.

Electrode Placement Verification



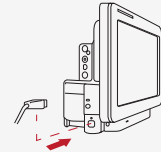
Verify effective electrode placement and optimal stimulation current.

Hand Held



Easy to move between the OR, PACU & ICU.

Data Connectivity



Connectivity with major EMR systems and patient monitors i.e. Philips.

SIMPLE. ECONOMICAL. COMPLETE.

Quantitative NMT Monitoring



Reduce incidents of PORC (Post-Operative Residual Curarization).

Reusable Sensor



The reusable AMG Sensor is an efficient cost saver.

Electrode Compatibility



Options to use either standard ECG electrodes for stimulation or disposable EMG electrode for all tucked arm procedures.



Nerve Location



Can also be utilized for regional blockade.

SIMPLE. ECONOMICAL. COMPLETE.

Focus on Patient Care



Enable simple and safe confirmation of neuromuscular blockades and the key patient management needs for surgery and PACU. Optimize care in all clinical settings.

Focus on Hospital Budgeting



Optimize cost of care with either reusable AMG sensor or single use EMG electrode.

Focus on Anaesthesia Care Team



Provide a reliable, portable and versatile device ready at a moment's notice. Now select either AMG or EMG modality at the point of care.

INTERNATIONAL PRACTICE GUIDELINES

The STIMPOD fully complies with international guidelines (ASA/ ESAIC, etc.), recommending quantitative NMT be used in all instances where neuromuscular blocking agents are administered.



American Society of
Anesthesiologists™



PERFORMANCE & TECHNICAL SPECIFICATIONS

Stimulation Settings

Operating Modes	NMT Mode	Nerve Mapping Mode	Nerve locating Mode
Stimulus Type	Current Controlled	Current Controlled	Current Controlled
Stimulus Waveform	Monophasic Square Wave	Monophasic Square Wave	Monophasic Square Wave
Stimulus Pulse Width	200µs ± 5%	50µs, 100µs, 350µs, 500µs ± %5 1ms ± %5	50µs, 100µs, 350µs, 500µs ± 5% 1ms ± 5%
Stimulus Voltage	400V _{max}	400V _{max}	100V _{max}
Stimulus Current	0-80mA ± 5%	0-20mA ± %5	0-5mA ± 5%
Stimulus Frequency	1Hz, 2Hz, 5Hz, 50Hz, 100Hz ± 5%	1Hz, 2Hz, 5Hz ± 5%	1Hz, 2Hz, 5Hz ± 5%
Load Impedance	0kΩ - 5kΩ	0kΩ - 20kΩ	0kΩ - 20kΩ
Operational Modes	AUTO, TOF, PTC, SMC, DEP, ST, DB, TET -		-

NMT Range of Measurement

Attribute	Acceleromyography (AMG)	Electromyography (EMG)
Fundamental Unit of measure	3-Axis Acceleration	Compound Muscle Action Potential
Range of Measure	± 4g	± 30mV
Evoked Response	Magnitude of Acceleration Vector Minimum Magnitude of 30 milli-g	Area under the curve Minimum Amplitude of 400µV

Power Supply

Source	Type	Form Factor	Rating	Electrical Interface/s
Removable Battery	Rechargeable Lithium Ion	21700	3.6v, 5000mAh	Internal 5V, 2A Charger - USB Interface External 5V, 2A Desktop Charger 5 hours 30 mins to full charge at 1.3A _{max}

* The battery cannot be charged internally while the STIMPOD NMS450X+ is in use.

Power Consumption

NMT Mode (AMG)		NMT MODE (EMG)		MAP Mode / LOC Mode	
Average Power	Continuous Use	Average Power	Continuous Use	Average Power	Continuous Use
460mW @ 130mA	Up to 35 Hours	520mW @ 150mA	Up to 32 Hours	426mW @ 120mA	Up to 38 Hours

* The maximum continuous use hours were determined for the recommended default display intensity - Increased display intensity settings shall result in a reduction of the continuous use hours.

Physical Attributes

Display	3.5" 24 bit Colour TFT LCD Display with Capacitive Touch Screen
Dimensions	174mm (L) x 90mm (W) x 35mm (H)
Weight (Device Without Battery)	195g
Weight (Device With Battery)	265g
Operating Temperature	10-40 °C
Storage & Transport Temperature	0 - 50 °C
Operating Humidity	90% RH
Storage & Transport Humidity	90% RH
Operating Atmospheric Pressure	50-106 kPa
Transport and Storage Atmospheric Pressure	50-106 kPa

XAVANT TECHNOLOGY:

YOUR PARTNER IN EDUCATION AND PROFESSIONAL DEVELOPMENT

At Xavant Technology, we believe that education is the key to unlocking the full potential of quantitative NMT monitoring. That's why we have made it our mission to provide comprehensive educational resources and opportunities to clinicians, students, and sales professionals.

Discover the Power of Knowledge with Xavant Technology. We believe in the importance of sharing clinical content and fostering a community of learning. That's why we actively share insightful peer-to-peer clinical content on our social media platforms - YouTube, LinkedIn, and Twitter.

Through exclusive interviews with international Key Opinion Leaders (KOLs) who are renowned experts in the field of neuromuscular blockade

monitoring, we bring you valuable insights and perspectives that further enrich your understanding on the field. Stay updated with the latest advancements, gain a deeper understanding of NMT monitoring, and enhance your expertise.

Join us on our **social media platforms** and delve into a world of knowledge. Together, let's expand our understanding of neuromuscular blockade monitoring and revolutionize patient care.



BEHIND THE MASK

XAVANT
TECHNOLOGY



www.linkedin.com/company/xavant-technology



twitter.com/Xavant_Tech



www.youtube.com/c/XavantTechnology



Safe administration and reversal of neuromuscular blocking drugs in daily practice
Dr. Guy Cammu, Dr. Hugo Carvalho



Accredited Courses

As part of our commitment to education, we are proud to offer free online courses through our **Xavant University**. These courses are designed to empower individuals with in-depth knowledge and practical skills in quantitative NMT monitoring. Whether you are a clinician looking to enhance your expertise, a student seeking to expand your understanding, or a sales professional aiming to better serve your customers, our online courses cater to your specific needs.

We also offer **webinar courses**, quick guide set-up materials, and much more to ensure that our customers have access to a comprehensive range of educational resources. We understand that continuous learning is essential for professional growth and we strive to provide the tools necessary for success.

Excitingly, we have recently partnered with **Xpeer Medical Education**, a renowned platform that offers Continuing Medical Education (CME) credits in over 26 countries, predominantly in Europe. This collaboration allows healthcare professionals to earn CME credits while expanding their knowledge of quantitative NMT monitoring.



www.xpeer.app



www.university.xavant.com