

Medtronic

Engineering the extraordinary

NIM Vital™ nerve monitoring system

Protect all
that is vital



Your patients trust you to protect all that is vital during head and neck procedures, their quality of life. That includes preserving laryngeal and facial nerve function and reducing the possibility of nerve palsy.



We're bringing you the next generation of nerve monitoring technology to give you a strategic advantage and greater confidence when monitoring nerve function. Helping to inform your surgical strategy to let your patients continue living fully and feeling deeply.

Advanced technology to inspire and improve

We've advanced the NIM technology to provide detailed intraoperative nerve condition information:

- Proprietary technology notifies you in real time of nerve condition – visually and audibly.
- NIM Nervassure™ continuous monitoring technology provides real-time feedback on nerve function so you can adjust course, if necessary, during thyroid surgery and other procedures affecting head and neck nerves.
- NIM NerveTrend™ EMG reporting enables nerve condition tracking throughout a procedure, even when using intermittent nerve monitoring.
- During both continuous and intermittent trending, green, yellow and red status bars provide visual information and their associated tones provide audible cues, making monitoring nerve function and interpreting EMG trends easier than ever.⁸
- NIM Vital™ nerve condition information can be captured in a single, meaningful snapshot.

Greater confidence, enabling better patient outcomes

Nerve monitoring:

- Increases operative efficiency and precision.¹³
- Reduces the risk of intraoperative nerve damage.¹
- Reduces the amount of time needed to identify motor nerves.¹³
- Helps surgeons identify the site of nerve injury, helping to inform surgical decisions.¹⁴

NIM Vital™ nerve monitoring system



Fully mobile and ergonomic

NIM Vital™ cart enhancements include high quality industrial wheels which improve cart maneuverability.¹⁷ An ergonomic handle is designed to transport the system with ease.¹⁸



Future features unlocked with ease

The NIM Vital™ product platform allows easy expansion to unlock additional future functionality, enabling use of nerve monitoring to help protect nerve condition and patients' quality of life.^{1,2}



Experience a quieter procedure

NIM Vital™ system offers reduced artifact when compared to other nerve monitoring systems.^{19***}

- Intelligent noise reduction technology suppresses artifact events by 94.5%, for a quieter experience.^{9***}
- Clinically relevant audible cues alert you to nerve functional status.¹⁰
- Proprietary technology enables monitoring nerve condition through Medtronic Advanced Energy device use.¹¹



A wireless design reduces constraints

- Wireless patient interface and muting streamline the number of wires to the console, reducing the risk of tripping over cables in the OR and simplifying setup and tear down.¹⁵
- Wireless console projection onto LCD screens means you can place the NIM Vital™ system anywhere in the OR to reduce space constraints.



Creating an efficient workflow

Enhanced visualization helps you be more efficient.

- A larger touch-screen and streamlined user interface provide a more intuitive, guided workflow.¹²
- Smart troubleshooting pop-ups alert staff to system issues and offer resolution protocols.
- Enhanced remote control of critical settings from the surgical field.



vital to
quality
of life

Because nerves and senses are vital to quality of life

Find out how using NIM Vital™ system to monitor nerve function during head and neck procedures will inspire your surgical strategy to help **protect your patients' nerves** so they can live fully and feel deeply.

Contact your Medtronic representative to learn more.

Ordering Information

Part number	Description	Quantity
NIM4CM01	NIM Vital™ Console	1
1897821	Power Cord - North America, 6 meter	1
NIM4CPB1	NIM Vital™ Patient Interface 4 Channel	1
NIM4CPB2	NIM Vital™ Patient Interface Cable	1
NIM4CAM1	NIM Vital™ Mute Probe Adaptor	1
8220325	NIM™ Mute Probe	1
8225825	Prass Standard Tip Incrementing Probe	3
NIM4CAD400	NIM™ Incrementing Probe Adaptor	1
NIM4CC01	NIM Vital™ Cart	1
8253600	Patient Simulator, Universal	1
NIM4CD01	Wireless Display	1

*more robust EMG information

**compared to visualization alone

***compared to NIM™ 3.0 Response and NIM™ 3.0 Neuro

References

1. Dionigi G, et al. Why monitor the recurrent laryngeal nerve in thyroid surgery? *J Endocrinol Invest.* 2010; 33: 819-822.
2. Wilson JA, Deary IJ, Miller A, et al. The quality of life impact of dysphonia. *Clin Otolaryng* 2002;27:179-82.
3. Thomusch O, et al. Intraoperative neuromonitoring of surgery for benign goiter. *Amer J Surg.* 2002;183(6):673-8.
4. Dionigi G, et al. Why monitor the recurrent laryngeal nerve in thyroid surgery? *J Endocrinol Invest.* 2010; 33: 819-822.
5. Randolph GW and Dralle H with the International Intraoperative Monitoring Study Group. Electrophysiologic recurrent laryngeal nerve monitoring during thyroid and parathyroid surgery: international standards guideline statement. *Laryngoscope* 2011; 121:S1-S16.
6. Stopa M. Prognostic value of intraoperative neural monitoring of the recurrent laryngeal nerve in thyroid surgery. *Langenbecks Arch Surg* (2017) 402:957-964.
7. Schneider R, Sekulla C, Machens A, Lorenz K, Nguyen P, Dralle H. Postoperative vocal fold palsy in patients undergoing thyroid surgery with continuous or intermittent nerve monitoring. *BJS.* 2015; 102:1380-1387.
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14. Dionigi G, Bacuzzi A, Rausei S, et al.: The technique of intraoperative neuromonitoring in thyroid surgery. *Surg Technol Int.* 2010;19:25-37.
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19. Data on file.

The NIM Vital™ system does not prevent the surgical severing of nerves. If monitoring is compromised, the surgical practitioner must rely on alternate methods, or surgical skills, experience, and anatomical knowledge to prevent damage to nerves.

Rx only. Refer to product instruction manual/package insert for instructions, warnings, precautions and contraindications.

For further information, please call Medtronic ENT at 800.874.5797 or consult Medtronic's website at medtronicent.com.

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