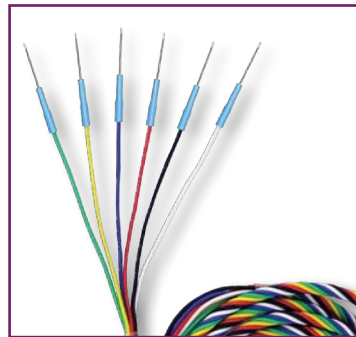




2023 Neuro Product Catalog



INNOVATIVE

patient monitoring solutions



EMG



NCS



EEG



IOM



PSG



Accessories

LifeSync Neuro (formerly Rochester) offers a comprehensive portfolio of neurodiagnostic patient monitoring solutions including electrodes, needles and other accessories. LifeSync Neuro ensures you have the right solution for simple, reliable and cost-effective patient monitoring.

LifeSync innovation extends far beyond the products we design, create and supply. We work closely with our customers every day to deliver efficiency for healthcare teams and more comfort for patients. We focus on performance, ease of use and value—all in the drive for optimized monitoring and patient care.

Rely on LifeSync Neuro for your EEG, EMG, IOM, and PSG needs and for personalized, responsive service.

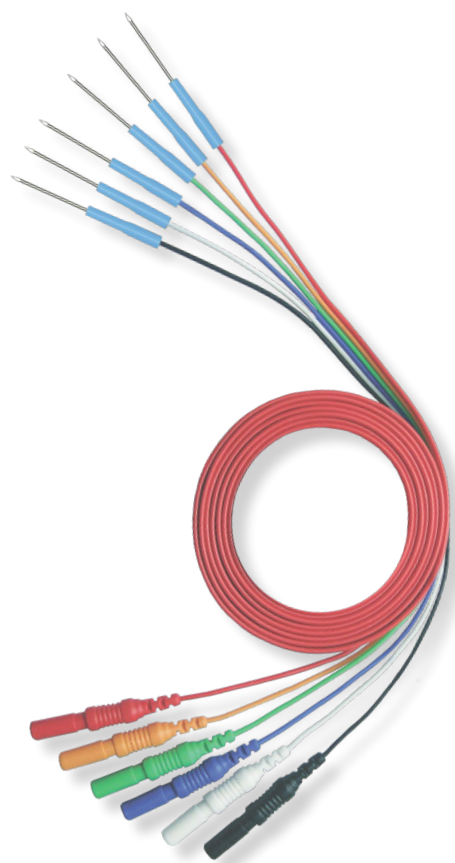


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EMG/NCS: Increasingly targeted and accurate

EMG and NCS TRENDS

Electromyography is considered an extension of the neurological physical examination. EMGs help detect the presence, location, extent and therapeutic response of a variety of neuromuscular diseases. NCS are performed to measure the amplitude, latency, and velocity at which the nerve impulse is traveling through the nerves' fibers. The nerve evaluated—sensory, motor or mixed—and anatomical localization define the technique to be used selecting the appropriate recording and stimulation zones. Trends associated with EMG and NCS include:

- Botulinum toxin is increasingly being used for the treatment of forms of focal dystonia, spasticity, strabismus, blepharospasm, hemifacial spasm, headache and hyperhidrosis. EMG assists with correct muscle localization prior to injection of botulinum toxin via hollow core monopolar EMG needles.
- For SFEMG, concentric needle electrodes (CNEs) are being used in lieu of single-fiber electrode (SFE) needles. SFEs are appreciated for their small surface size relative to muscle fiber and their clean signals with less need for filtering; however, they are significantly more expensive than CNEs. Several studies suggest that CNE specificity may be similar to recordings performed with SFEs.¹ CNEs have replaced SFEs in many countries to measure jitter due to restrictions on reusable materials.² Single-use CNEs address potential concerns around disease transmission associated with the reusable SFEs.³
- The reusable surface electrodes often used in the past—metal disks or metallic wire loops—are increasingly being replaced by self-adhesive, disposable electrodes to reduce the risk of infection and for convenience. Typically made of silver-silver chloride, these pre-gelled adhesive electrodes often can be applied several times on a single patient before replacement.⁴ Also, the gel composition of some products allow them to function as stimulators.
- Innovative computer-based algorithms for quantitative EMG analysis are advancing clinical evaluation and the use of bionic prostheses.

A BRIEF HISTORY of electromyography (EMG) and nerve conduction studies (NCS)

- 1771: Galvani demonstrated that electrical stimulation of animal muscle tissue produced contraction.
- 1929: Adrian created a method for recording a single motor unit potential by connecting concentric needle electrodes to an amplifier and a loudspeaker.
- 1938: Denny-Brown described fasciculation potentials and separated them from fibrillations.
- World War II: Larrabee began measuring the compound muscle action potential in healthy and injured nerves of war victims.
- 1957: Lambert and Eaton described the electrophysiologic features of a new myasthenic syndrome associated with lung carcinoma.
- Early 1960s: Single-fiber electromyography (SFEMG) began to develop when Ekstedt and Stålberg created a multielectrode to record action potentials from single muscle fibers.
- 1980s: Use of SFEMG grows for the diagnosis of suspected myasthenia gravis or other neuromuscular transmission disorders like Lambert-Eaton syndrome.



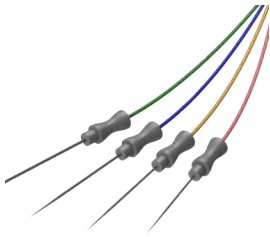
COMMON EMG and NCS CHALLENGES AND SOLUTIONS

Today, there are ways for neurologists and neurodiagnostic technicians to quickly and efficiently deliver optimized test results. Some of the more common challenges faced in everyday practice are noted below, along with potential solutions.

CHALLENGE	POTENTIAL SOLUTION	RATIONALE
Patient discomfort with EMG needles	Conical and trocar tips on thin gauge needles For SFEMG, consider CNEs instead of SFEs	<ul style="list-style-type: none"> Sharp, conical needle tips and smaller gauges (e.g., 29 gauge) provide easy insertion with less bleeding The CNE shaft diameter is smaller and the tip is sharper than SFE, so the CNE is easier to insert into the muscle, less painful and better tolerated³
Slippery needle hub makes repositioning difficult	EMG needles with textured or corrugated hubs	<ul style="list-style-type: none"> A better grip aids in fast and accurate repositioning maneuvers
Reusable stimulator requiring cleaning and/or disposables electrodes that only pick up signal	Disposable surface electrode stimulators	<ul style="list-style-type: none"> Some pre-gelled surface electrodes can both capture signal and deliver stimulation due to the gel composition
EMG cable attachment/detachment hassles	Single-patient use EMG needles with integrated cables	<ul style="list-style-type: none"> Single-patient use needles with attached leadwires are quick to use both for application and disposal
Costs of single-fiber needles electrodes (SFEs)	Use concentric needle electrodes (CNEs)	<ul style="list-style-type: none"> CNEs are less expensive than SFEs, safe and well tolerated by patients¹ Concentric needles can collect single-fiber-like data by increasing the cutoff frequency of the high pass filter to help distinguish individual spikes within the MUP⁴
Cleaning/processing and cross-contamination risk of reusable surface electrodes	Disposable pre-gelled electrodes	<ul style="list-style-type: none"> Single-patient use pre-gelled electrodes facilitate fast, accurate and effective application while eliminating cross-contamination risk; excellent adhesion supports electrode repositioning as needed
Artifact from 50-60Hz power sources	Shielded cables	<ul style="list-style-type: none"> For clear and reliable signal, cables should be short, fixed, shielded, and separated from others (e.g., recording and stimulator cables)⁴
Ensuring leak-free Botox injections	Secure, luer-lock syringe connections	<ul style="list-style-type: none"> In addition to luer locks, look for injectable needles that facilitate smooth insertion and for convenience, have attached leads—both the needle and wire are single-patient use
Extreme patient discomfort and skin burns during NCS electrical stimulation, especially in patients with high BMI	Consider a different stimulator	<ul style="list-style-type: none"> Long-probe stimulators push down subcutaneous and adipose tissue, increasing the chances of effective nerve stimulation without reaching high current levels that might also affect skin integrity

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- ⁴ Tankisi H et al. Standards of instrumentation of EMG. Clin Neurophysiol. 2020;131:243–258.



UltraPoint™ Monopolar Needles

Needle wires are color-coded by gauge for easy identification. Attached 30" leads—the needle and wire are completely disposable. Sharp, conical needle tip provides easy insertion with less bleeding. 29 gauge available for ease of insertion and less bleeding. Not detachable.

25 needles per box • Wire length 2.5 ft. (.76m) • Sterile • Single patient use.

Part Number	Gauge (Needle Diameter)	Needle Length	Wire Color	Price (1-4 boxes)	Price (5-9 boxes)
NM-016380	29 ga. (0.33 mm)	37 mm (1.5")	Red	\$76.96 box	\$72.80 box
NM-016383	28 ga. (0.35 mm)	37 mm (1.5")	Orange	\$76.96 box	\$72.80 box
NM-016384	28 ga. (0.35 mm)	45 mm (1.8")	Orange	\$76.96 box	\$72.80 box
NM-016386	27 ga. (0.40 mm)	25 mm (1.0")	Blue	\$76.96 box	\$72.80 box
NM-016388	27 ga. (0.40 mm)	37 mm (1.5")	Blue	\$76.96 box	\$72.80 box
NM-016391	27 ga. (0.40 mm)	50 mm (2.0")	Blue	\$76.96 box	\$72.80 box
NM-016393	26 ga. (0.45 mm)	37 mm (1.5")	Green	\$76.96 box	\$72.80 box
NM-016395	26 ga. (0.45 mm)	50 mm (2.0")	Green	\$76.96 box	\$72.80 box
NM-016397	26 ga. (0.45 mm)	75 mm (3.0")	Green	\$76.96 box	\$72.80 box



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QUANTITY DISCOUNT: Order 10+ boxes of any combination for \$65.00/box!



Technomed Monopolar Needles

Clear and reliable signal. Optimal patient comfort with ease of penetration and repositioning. Tip design reduces bleeding. Attached leads - the needle and wire are completely disposable. Not detachable. Trocar tip.

25 needles per box • Wire length 2.5 ft. (.76m) • Sterile • Single patient use.

Part Number	Gauge (Needle Diameter)	Needle Length	Hub Color	Price (1-4 boxes)	Price (5-9 boxes)
NM-TEAP2535335/01	28 ga. (0.35 mm)	25 mm (1.0")	Red	\$76.96 box	\$72.80 box
NM-TEAP2545335/01	26 ga. (0.45 mm)	25 mm (1.0")	Yellow	\$76.96 box	\$72.80 box
NM-TEAP3735335/01	28 ga. (0.35 mm)	37 mm (1.5")	Orange	\$76.96 box	\$72.80 box
NM-TEAP3745335/01	26 ga. (0.45 mm)	37 mm (1.5")	Green	\$76.96 box	\$72.80 box
NM-TEAP5045335/01	26 ga. (0.45 mm)	50 mm (2.0")	Blue	\$76.96 box	\$72.80 box
NM-TEAP7545335/01	26 ga. (0.45 mm)	75 mm (3.0")	Purple	\$76.96 box	\$72.80 box



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Technomed Detachable Monopolar Needles

Cable sold separately.

25 needles per box • Wire length 2.5 ft. (.76m) • Sterile • Single patient use.

Part Number	Gauge (Needle Diameter)	Needle Length	Hub Color	Price (1-4 boxes)	Price (5-9 boxes)
NM-TEAD2535008	28 ga. (0.35 mm)	25 mm (1.0")	Red	\$76.96 box	\$72.80 box
NM-TEAD2545008	26 ga. (0.45 mm)	25 mm (1.0")	Yellow	\$76.96 box	\$72.80 box
NM-TEAD3735008	28 ga. (0.35 mm)	37 mm (1.5")	Orange	\$76.96 box	\$72.80 box
NM-TEAD3745008	26 ga. (0.45 mm)	37 mm (1.5")	Green	\$76.96 box	\$72.80 box
NM-TEAD5045008	26 ga. (0.45 mm)	50 mm (2.0")	Blue	\$76.96 box	\$72.80 box
NM-TEAD7545008	26 ga. (0.45 mm)	75 mm (3.0")	Purple	\$76.96 box	\$72.80 box



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QUANTITY DISCOUNT: Order 10+ boxes of any combination for \$65.00/box!



Reusable Cable for Detachable Monopolar Needles

Part Number	Description	Price
NM-TED34231	Unshielded Detachable Cable - 0.6 m length	\$20.80 cable
NM-TED54451	Shielded Detachable Cable - 1.0 m length	\$41.60 cable



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Technomed Concentric Needles

Clear and reliable signal with new recording area design and shielded cable. Optimal patient comfort with ease of penetration and repositioning. Precise handling with new ergonomic hub and cable design. Cable sold separately.

25 needles per box • Wire length 2.5 ft. (.76m) • Sterile • Single patient use.

Part Number	Gauge (Needle Diameter)	Needle Length	Hub Color	Price
NC-853025	30 ga. (0.30 mm)	25 mm (1.0")	Red	\$187.20 box
NC-852725	27 ga. (0.40 mm)	25 mm (1.0")	Yellow	\$187.20 box
NC-852637	26 ga. (0.45 mm)	37 mm (1.5")	Green	\$187.20 box
NC-852650	26 ga. (0.45 mm)	50 mm (2.0")	Blue	\$187.20 box
NC-852375	23 ga. (0.60 mm)	75 mm (3.0")	Purple	\$187.20 box



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QUANTITY DISCOUNT: Order 5+ boxes of any combination for \$177.00/box!

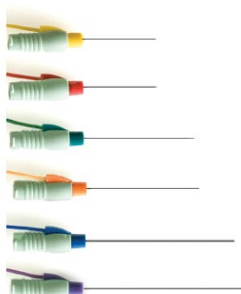


Reusable Cable for Concentric Needles

Part Number	Description	Price
NC-850125	Detachable Cable - 5 Pin DIN - 1.25 m length	\$46.80 cable
NC-850200	Detachable Cable - 5 Pin DIN - 2.0 m length	\$52.00 cable



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Technomed Injectable Needles

Leak-free, secure Luer Lock syringe connection. Smooth insertion. Attached leads - the needle and wire are completely disposable. Optimal for Botox injections.

10 needles per box • Wire length 2.5 ft. (.76m) • Sterile • Single patient use.

Part Number	Gauge (Needle Diameter)	Needle Length	Hub Color	Price
NI-982725	27 ga. (0.40 mm)	25 mm (1.0")	Yellow	\$150.80 box
NI-983025	30 ga. (0.30 mm)	25 mm (1.0")	Red	\$150.80 box
NI-982637	26 ga. (0.45 mm)	37 mm (1.5")	Green	\$150.80 box
NI-982737	27 ga. (0.40 mm)	37 mm (1.5")	Orange	\$150.80 box
NI-982550	25 ga. (0.50 mm)	50 mm (2.0")	Blue	\$150.80 box
NI-982275	22 ga. (0.70 mm)	75 mm (3.0")	Purple	\$150.80 box



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QUANTITY DISCOUNT: Order 5+ boxes of any combination for \$141.00/box!



Digital Ring Electrodes

Easy adjustability to fit all sizes. Durable — designed for long-term use. 2 ft. (.61 m) heavy duty twisted lead wires.

Part Number	Size	Wire Color	Package Size	Price
AC-038375-P1	Adult	Red, Black	1 pair	\$31.20 pair



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Fixed Bar Electrodes

4 ft. (1.2 m) twisted lead wires. Features tin discs.

Part Number	Contact Disc Diameter	Space Between Discs	Wire Color	Price
AC-032543-P1	9 mm (0.35")	3 cm (1.18")	Red, Black	\$26.00



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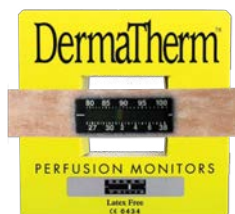
No Touch Digital Infrared Thermometer

Measure temperature during NCS or other tests. No contact necessary - quick and easy. Auto-shutoff after 8 seconds. Backlit display. 9V battery.

Part Number	Temperature Range	Price
AC-JPD-FR202	90°-109° F, 32°-42.9° C	\$ 54.40 each



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Derma-Therm™ Temperature Bands

Measure skin temperature during NCS or other tests. Latex-free. Peel and stick, disposable.

Part Number	Package Size	Temperature Range	Price
AC-2100PB	100/pack	79°-101° F, 26°-38° C	\$93.60 pack
AC-2105PB	50/pack	79°-101° F, 26°-38° C	\$52.00 pack
AC-2150PB	250/pack	79°-101° F, 26°-38° C	\$208.00 pack



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Reusable Ground Electrodes

Part Number	Size	Type	Wire Length	Price
AC-035687-P1	1.25" diameter	Stainless Steel	30" (0.76 m)	\$18.72 each
AC-035689-P1	1.25" diameter	Stainless Steel	4 ft. (1.2 m)	\$18.72 each



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Disposable Pre-gelled Electrodes

Pre-gelled for fast, accurate and effective application. Excellent adhesion for short-term or long-term use. 50 packs, each pack contains either 3 or 4 electrodes. Single patient use only.

Part Number	Wire Length	Electrodes/ Package	Lead Wire Colors Included in Package	Price
SE-222000-50	3 ft. (0.91 m)	3/pack	Red, Black, White	\$143.00 box
SE-222111-50	6 ft. (1.83 m)	3/pack	Red, Black, White	\$150.80 box
SE-222466-50	6 ft. (1.83 m)	4/pack	Red, Black, White, Green	\$193.99 box



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Technomed Disposable Stick-on & Ground Electrodes



Part Number	Wire Length	Electrodes/ Package	Packages/ Box	Lead Wire Colors Included in Package	Price
SE-222410-10	1.0 m	4/pack	10 pack/box	Red, Blue, Green, Black	\$39.00 box
SE-222420-10	2.0 m	4/pack	10 pack/box	Red, Blue, Green, Black	\$39.00 box
SE-222810-20	1.0 m	1/pack	20 pack/box	Green	\$43.68 box
SE-222820-20	2.0 m	1/pack	20 pack/box	Green	\$43.68 box



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Disposable Tab Electrodes & Alligator Clips



Part Number	Wire Length	Package Size	Price
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Vermed® Tab Electrodes

SE-310021-0	Need Alligator Clip	case of 1000	\$93.60 case
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Kendall™ NUTAB™ Tab Electrodes

SE-388007	Need Alligator Clip	case of 1000	\$52.00 case
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Alligator Clips

Part Number	Wire Length	Package Size	Lead Wire Colors Included in Package	Price
SE-602924-R	2 ft. (0.61 m)	each	Red	\$7.28 each
SE-602924-B	2 ft. (0.61 m)	each	Black	\$7.28 each
SE-602924-G	2 ft. (0.61 m)	each	Green	\$7.28 each



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Disposable Cardiac Snap Electrodes

MEDITRACE® Pre-gelled Cardiac Snap Electrodes

Part Number	Electrode Size	Package Size	Price
SE-310781-0	Large (1-7/16" x 1-11/16")	600/case	\$124.80 case



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Solid Color Snap Leads

Extremely tough and durable. Bright, color-coded wires. 5 leads per package: Red, Black, Green, Brown, and White.

Part Number	Wire Length	Price
SE-652040	40" (1.0 m)	\$27.04 pack
SE-652072	72" (1.8 m)	\$22.88 pack
SE-652120	120" (3.1 m)	\$26.00 pack



[Buy it now](#)



Premium Shiny Silver Snap Leads

Extremely tough and durable. Shiny, reflective silver wires. Color coded on both ends. 2 snap leads per pack.

Part Number	Wire Length	Colors	Price
SE-602899	5 ft. (1.5 m)	Red & Black	\$24.96 pack
SE-602831	8 ft. (2.5 m)	Red & Black	\$33.28 pack
SE-602890	10 ft. (3.1 m)	Red & Black	\$41.60 pack
SE-602865	5 ft. (1.5 m)	Green & White	\$24.96 pack
SE-602868	8 ft. (2.5 m)	Green & White	\$33.28 pack
SE-602861	10 ft. (3.1 m)	Green & White	\$41.60 pack



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EEG: Leads to critical information

EEG TRENDS

Noninvasive electroencephalogram (EEG) tests detect and record electrical activity via electrodes. EEGs play a vital role in the diagnosis, classification and therapeutic response of epileptic syndromes. Among the trends associated with EEGs are:

- The use of long-term monitoring (LTM) EEG procedures in the U.S. continues to grow. For example, long-term video EEG Medicare claims increased more than 100 percent in a five-year period: from 53,000 in 2009 to 115,000 in 2014.¹
- As the number of LTM EEGs increases, so do concerns regarding potential skin damage due to prolonged electrode exposure. A literature review pertaining to EEG electrode use and skin breakdown reported a 10-11.4% incidence of skin injury in pediatric populations, with a projected incidence from 25-35% for all EEG patients.² Another study of 861 patients in an epilepsy monitoring unit undergoing video EEG monitoring found that skin irritation occurred in 27.3% of patients and was moderate or severe in 19.1%.³ Significantly higher risk of irritation was associated with electrode placement on the face and with four days or more of monitoring.³
- Prevention of healthcare-acquired pressure ulcers (HAPU) remains a significant focus in hospitals and long-term EEG studies have been identified as a contributor to this issue.⁴ A study examining hospital-acquired pressure ulcers in children indicated that EEG leads rank 6th in a list of 18 identifiable HAPU causes.⁵ Pressure ulcer risk is due in part to items used to secure the electrodes and moisture that can form between those layers.⁶
- Continuous EEG (cEEG) monitoring has increased dramatically in the last decade in part to provide more accurate information related to epilepsy diagnoses⁷⁻⁹ and also due to monitoring of elderly hospitalized patients who present with new-onset seizures.⁴ Advanced age is associated with both higher incidence and severity of EEG monitoring-related pressure ulcers.⁴ Given the growing elderly patient population in the U.S., it is useful to explore recommendations specific to these patients.
- EEG is becoming an important part of “assistive technologies,” which helps patients with disabilities perform daily in-home tasks based on computer-based analyses of the brain’s electrical activity. The exploration and use of brain-computer interfaces continues to advance.

A BRIEF HISTORY of electroencephalography (EEG)

- English scientist Richard Caton (1842–1926) recorded electrical activity from the brains of animals using a sensitive galvanometer, noting fluctuations in activity during sleep and absence of activity following death.
- 1924: Hans Berger (1873–1941), a German psychiatrist, recorded the first human EEGs.
- 1934: Fisher and Lowenback first demonstrated epileptiform spikes.
- 1935: Gibbs, Davis and Lennox described interictal epileptiform discharges and 3-Hz spike-wave patterns during clinical seizures.
- 1936: Gibbs and Jasper described focal interictal spikes.
- 1930s-1940s: The first clinical EEG laboratories were established in the United States.
- 1947: The American EEG Society, later the American Clinical Neurophysiology Society, was founded.



COMMON EEG CHALLENGES AND SOLUTIONS

See below for some of the more common challenges related to EEG testing along with potential solutions.

CHALLENGE	POTENTIAL SOLUTION	RATIONALE
Potential skin damage from electrode heating for patients with fragile skin (e.g., neonates in incubators)	Gold plated electrodes	<ul style="list-style-type: none"> ASET (The Neurodiagnostic Society) EEG procedure skin safety guidelines state that "it has been noted that the temperature of gold-plated electrodes seems to remain constant in comparison to other metals"⁶ while others suggest that only gold disposable electrodes should be used for neonates to prevent burns in the incubators.⁵
Reusable electrodes wear out sooner than expected	EEG reusable Kevlar® electrodes	<ul style="list-style-type: none"> Reinforced cables are designed to last longer than conventional EEG reusables with PVC cables.
Potential cross-contamination risk	EEG disposable electrodes	<ul style="list-style-type: none"> Single-patient use monitoring products do not require the cleaning and maintenance that reusables do. ASET recommends disposable electrodes for use with critically ill patients.⁵ A multicenter study of exploring contamination of reusable EEG cup electrodes and leadwires found bacteria on 22.6% of the electrodes and leadwires after they were cleaned.¹⁰
Skin reactions to prep materials	Hypoallergenic pastes and gels	<ul style="list-style-type: none"> Coupling hypoallergenic products with good technique (e.g., allowing sufficient space to place two fingers under head wraps) can help avoid skin irritation and breakdown.
Cable management/tangled cables	Ribbon configuration EEGs or silicone wires	<ul style="list-style-type: none"> Ribbon configurations aid in wire organization and easy identification of special montages. Leads with silicone covers are tangle-free.
Electrode management for CCEEG (critical care continuous EEG) patients	CT-and MRI-compatible electrodes	<ul style="list-style-type: none"> More than 50% of patients will require neuroimaging with MRI or CT during the course of CCEEG monitoring.¹¹ These compatible electrodes (e.g., conductive plastic electrodes, subdermal wire electrodes) can remain in place during imaging, reducing both electrode application time and skin breakdown caused by frequent electrode removal and reapplication.¹⁰ When possible, the American Clinical Neurophysiology Society (ACNS) guidelines suggest that CT- and/or MRI-compatible electrodes be used,¹¹ especially if the patient is likely to require repeated neuroimaging studies.¹²

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Part Number	Disc Size	Disc Type	Wire Length	Price
DE-BMS045T15-6TM	6 mm	Molded Gold	6 ft. (1.8m)	\$95.00 box
DE-BMS045T15-4TM	10 mm	Molded Gold	4 ft. (1.2 m)	\$90.00 box
DE-BMS045T15-5TM	10 mm	Molded Gold	5 ft. (1.5 m)	\$93.00 box
DE-BMS045T15-6TM	10 mm	Molded Gold	6 ft. (1.8 m)	\$95.00 box
DE-BMS045T15-8TM	10 mm	Molded Gold	8 ft. (2.5 m)	\$97.00 box

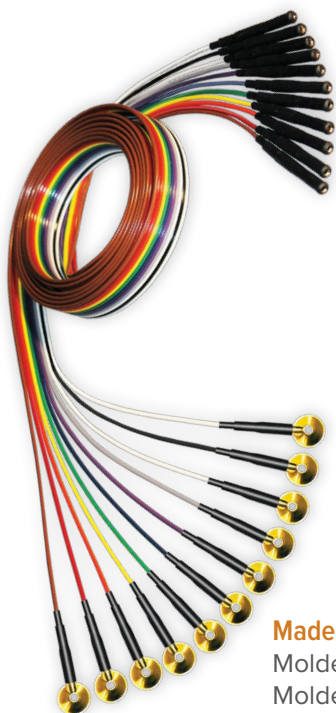


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Part Number	Disc Size	Disc Type	Wire Length	Price
DE-BMS042T15-4TM	10 mm	Molded Silver	4 ft. (1.2 m)	\$89.00 box
DE-BMS042T15-5TM	10 mm	Molded Silver	5 ft. (1.5 m)	\$92.00 box



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Everlast™ Cup Electrodes with Ribbon PVC Wire

Ribbon style reduces movement and sway artifact. Extremely flexible PVC wire in 10 different colors, 11 electrodes/ribbon. Sets can be easily pulled apart and separated into smaller arrays or singles as needed. Two sets provide enough electrodes for a complete 10-20 system.

Made using adhesive shrink tubing to prevent fluid leaks and provide extra strength. 1 ribbon = 11 electrodes.

Made with Ultima™ Molded Discs

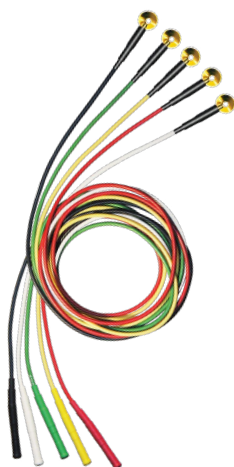
Molded gold electrodes are .999 pure silver plated in 24k gold. Molded silver electrodes are .999 pure silver.



Part Number	Disc Size	Disc Type	Wire Length	Price
DE-MS370T15-4	9 mm	Gold plated silver	4 ft. (1.2 m)	\$87.36 set
DE-MS370T15-5	9 mm	Gold plated silver	5 ft. (1.5 m)	\$87.36 set
DE-MS170T15-4	9 mm	Molded silver	4 ft. (1.2 m)	\$85.28 set
DE-MS170T15-6	9 mm	Molded silver	6 ft. (1.8 m)	\$85.28 set



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Everlast™ Cup Electrodes with Silicone Wire

Everlast cup electrodes with silicone wire. 5 colors. 5 electrodes per pack.

Part Number	Disc Size	Disc Type	Wire Length	Price
DE-MS616515	9 mm	Molded Gold	6 ft. (1.8 m)	\$45.76 pack



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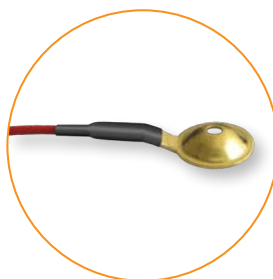


Part Number	Disc Size	Disc Type	Wire Length	Quantity per pack	Price
DE-003748	9 mm	Gold plated	4 ft. (1.2 m)	10	\$9.36 pack
DE-003760	9 mm	Gold plated	5 ft. (1.5 m)	10	\$9.36 pack
DE-003772	9 mm	Gold plated	6 ft. (1.8 m)	10	\$9.36 pack
DE-003710	9 mm	Gold plated	10 ft. (3.1 m)	10	\$11.44 pack



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DE-003748-25	9 mm	Gold plated	4 ft. (1.2 m)	25	\$26.00 pack
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Low profile shrink connection enhances patient comfort and cup shape holds plenty of paste.

Technomed Disposable Silver Chloride Cup Electrodes

Each package contains 25 electrodes. 5 vibrant colors of PVC wire. Disposable and affordable. Single patient use only.



Part Number	Disc Size	Disc Type	Wire Length	Price
DE-TEC52438	10 mm	Silver Chloride	1.0 m	\$17.68 pack
DE-TEC52638	10 mm	Silver Chloride	1.5 m	\$17.68 pack
DE-TEC52838	10 mm	Silver Chloride	2.0 m	\$17.68 pack



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Technomed Disposable Silver Chloride Deep Cup Electrodes

Each package contains 10 electrodes. 4 vibrant colors of PVC wire. Disposable and affordable. Single patient use only.

Part Number	Disc Size	Disc Type	Wire Length	Price
DE-TEC53432	9 mm	Silver Chloride	1.0 m	\$7.50 pack
DE-TEC53632	9 mm	Silver Chloride	1.5 m	\$7.50 pack
DE-TEC53832	9 mm	Silver Chloride	2.0 m	\$7.70 pack
DE-TEC53932	9 mm	Silver Chloride	2.5m	\$7.70 pack



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China Markers, Centimeter/Inch Measuring Tapes and Calipers

Part Number	Type	Package Size	Price
AC-200704	Blue	12 pack	\$14.56 pack
AC-200705	Red	12 pack	\$14.56 pack



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Measuring Tapes

Metric on one side/English on the other. Measurement markings start at the end of the tape.

AC-500600	Plastic	1 each	\$7.80 each
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IONM

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SpecialtyCare is the largest provider of intraoperative neuromonitoring (IONM) services in the nation, with 100,000 cases every year.

Our people work alongside the world's leading surgeons to help identify any early signs of neurological injury. Our surgical neurophysiologists are backed by our team of IONM physicians, who provide additional support with real-time monitoring through telecommunication, enabling timely interventions to avoid long-term neural problems. At SpecialtyCare, the health of the patient always comes first. As a partner in IONM, we are your insurance policy against risk and the high cost of patient injury, even during the most complex procedures like spine surgery, brain surgery, cardio surgery, vascular surgery, and general orthopedic surgery. You can rely on our expertise in IONM to reduce risk and help ensure patient safety.

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IONM: Partnering for better surgical care

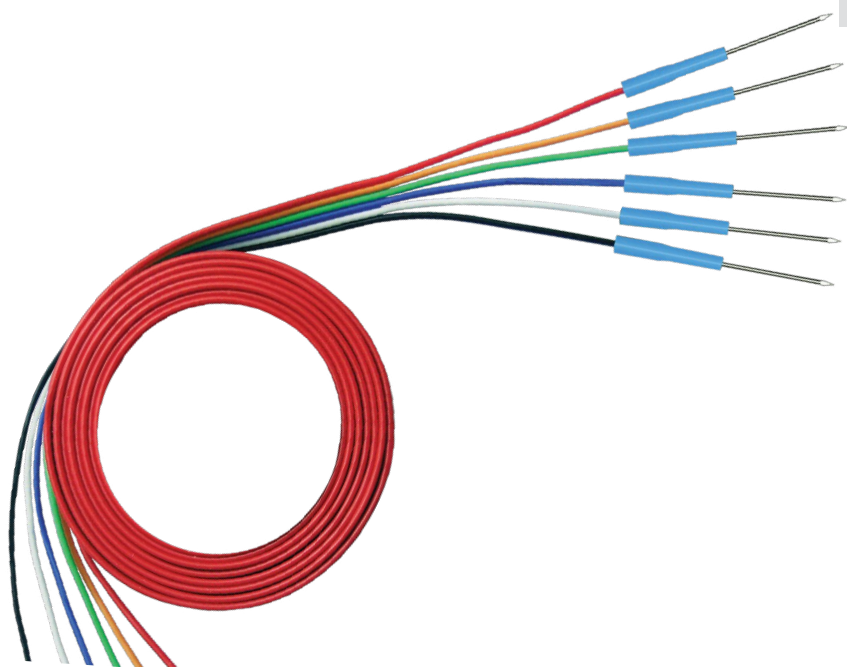
IONM TRENDS

Real-time IONM provides immediate feedback to help reduce iatrogenic injury. By delivering and measuring electrical impulses, trained clinicians can quickly identify changes that may require immediate attention by the surgical and anesthesia teams before permanent nerve injury occurs. The use of IONM continues to grow.

- IONM continues to expand in head and neck surgeries where accurate prediction of neural damage is difficult to achieve by direct visualization alone.¹
- IONM use in spine surgery also has grown significantly. One study showed an estimated increase of 296% in utilization of IONM during U.S. spinal surgeries, from 31,762 cases in 2008 to 125,835 cases in 2014. The researchers attributed this increase to IONM's proven benefit in reducing neurologic morbidity in spinal deformity surgery, while introducing minimal additional risk.²
- The widespread availability of computer networks and integrated communication systems have facilitated IONM from remote sites.³
- IONM service demand continues to exceed the limited supply of qualified subspecialized providers, which often necessitates telemedicine oversight of multiple simultaneous cases.⁴
- Several neurology and surgical professional associations have issued guidelines and/or position statements about the use of IONM. Among them are the American Clinical Neurophysiology Society (ACNS); the American Society of Neurophysiological Monitoring (ASNM); the American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM); the American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS) and the American Academy of Neurology (AAN).

A BRIEF HISTORY of intraoperative neuromonitoring (IONM)

- Wilder Penfield (1891-1976) creates the Montreal Procedure for the treatment of epilepsy, which uses EEG to guide the removal of parts of the neurocortex and deeper temporal region.⁵ In the late 1920s, he begins applying cortical stimulation to patients under local anesthesia.⁶
- 1970s: Somatosensory evoked potentials are introduced.⁷
- 1980s: Motor evoked potentials (MEPs) are introduced as a method for monitoring spinal cord activity and for predicting postoperative motor problems.⁷
- 1981: The first commercial IOM equipment is introduced. Prior to this neurophysiologists either created or modified EEG/EMG equipment for intraoperative use.⁷



COMMON IONM CHALLENGES AND SOLUTIONS

With any electrode in an IONM neurodiagnostic application, certain performance parameters apply: signal quality, signal-to-noise ratio and impedance, all of which affect the quality of monitoring. Other factors, like biocompatibility and patient comfort should be taken into account as well. As the use of IONM has broadened, the products and techniques used to support it have advanced, too. Some of the more common challenges that neurodiagnostic technicians face in their day-to-day practice are noted below, along with potential solutions.

CHALLENGE	POTENTIAL SOLUTION	RATIONALE
Decrease signal noise; improve signal-to-noise ratio	Electrodes in a twisted wire configuration	<ul style="list-style-type: none"> Twisted wires are known to have less noise than straight wires and cables; they are part of noise immunity/noise reduction techniques⁸
Needle electrodes detach from patient	Subdermal needles with a bend	<ul style="list-style-type: none"> Bent needles (e.g., 35-degree bend) are specially designed to stay in place during monitoring
Needle electrodes placed on the head detach	Corkscrew electrodes	<ul style="list-style-type: none"> The additional grab of a corkscrew needle allows it to remain in place even if the patient is turned during a procedure Can be used for both recording and stimulating Look for electrode grips (e.g., textured material) that make handling and insertion easy
Cumbersome lead/electrode arrays in the OR	Ribboned or twisted wire leads	<ul style="list-style-type: none"> Neatly organized leads avoid confusion and also do not tangle as easily with other devices in use such as ECG leads, cannulas, etc. Some twisted wire leads include adjustable plastic slides that allow wires to be separated to the desired length as needed
Accidental needle sticks in the OR	Pre-gelled adhesive surface electrodes	<ul style="list-style-type: none"> When appropriate, the use of pre-gelled adhesive electrodes eliminates the risk accidental sticks associated with needle electrodes Gels act as conductive material, aiding in signal delivery Fast to apply Look for good adhesion so electrodes remain in place Some pre-gelled electrodes capture both signals and electrode stimulation Best for recording or stimulation sites that do not get wet with corporal fluids, which can produce artifacts
Potential cross-contamination risk	Single-patient use surface electrodes for stimulation and grounding	<ul style="list-style-type: none"> Single-patient use monitoring products do not require the cleaning and maintenance that reusables do Disposables grounds are self-adhesive; no need for extra hook-and-loop fasteners to keep the grounds in place

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Single Subdermal Needle Electrodes

Stainless steel needles, lancet tips. 6 wire color options. 3-year shelf life. Sterile. Needle diameter: 27 ga. (0.4 mm). Single patient use only.

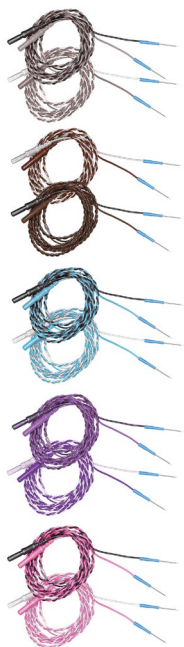
Part Number	Needle Length	Quantity/Box	Lead Length	Color Group
NS-S91615-A-24	6 mm	24/box	1.5 m (5 ft.)	Red, Yellow, Green, Blue, White, Black
NS-S94015-A-24	12 mm Bent	24/box	1.5 m (5 ft.)	Red, Yellow, Green, Blue, White, Black
NS-S81025-C-20	13 mm	20/box	2.5 m (8 ft.)	Red, Yellow, Green, Blue, White, Black, Brown, Orange, Purple, Gray
NS-S81015-A-24RM	13 mm	24/box	1.5 m (5 ft.)	Red, Yellow, Green, Blue, White, Black
NS-S81025-A-24RM	13 mm	24/box	2.5 m (8 ft.)	Red, Yellow, Green, Blue, White, Black
NS-S81915-A-24	19 mm	24/box	1.5 m (5 ft.)	Red, Yellow, Green, Blue, White, Black



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Twisted Paired Subdermal Needle Electrodes

Stainless steel needles, lancet tips. 10 wire color options. 3-year shelf life. Tightly twisted, high quality wire. Sterile. Needle diameter: 27 ga. (0.4 mm). Single patient use only.



Part Number	Needle Length	Quantity/Box	Lead Length	Color Group
NS-S82015-PT3-20RM	13 mm	20/box	1.5 m (5 ft.)	Red, Orange, Yellow, Green, Blue, White, L. Blue, Purple, Pink
NS-S82015-PT1-20RM	13 mm	20/box	1.5 m (5 ft.)	Red, Orange, Yellow, Green, Blue
NS-S82025-PT1-20RM	13 mm	20/box	2.5 m (8 ft.)	Red, Orange, Yellow, Green, Blue
NS-S82025-PT2-20RM	13 mm	20/box	2.5 m (8 ft.)	Gray, Brown, L. Blue, Purple, Pink
NS-S82025-PT3-20RM	13 mm	20/box	2.5 m (8 ft.)	Red, Orange, Yellow, Green, Blue, White, L. Blue, Purple, Pink



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Part Number	Pair Style	Needle Length	Quantity/Box	Wire Length	Color Group
NS-S82015-PT1-20RM	Twisted	13 mm	20/box	1.5 m (5 ft.)	Gray, Brown, L. Blue, Purple, Pink
NS-S82020-PT1-20	Twisted	13 mm	20/box	2.0 m (6.5 ft.)	Red, Orange, Yellow, Green, Blue
NS-S94425-PT1-20	Twisted	12 mm bent	20/box	2.5 m (8 ft.)	Red, Orange, Yellow, Green, Blue
NS-S82215-PT3-20	Twisted	24 mm	20/box	1.5 m (5 ft.)	Orange, Yellow, Green, Blue, Gray, Brown, L. Blue, Purple, Pink
NS-S83015-PL1-20	Parallel	13 mm	20/box	1.5 m (5 ft.)	Red, Orange, Yellow, Green, Blue
NS-S83015-PL2-20	Parallel	13 mm	20/box	1.5 m (5 ft.)	Gray, Brown, L. Blue, Purple, Pink
NS-S83025-PL1-20	Parallel	13 mm	20/box	2.5 m (8 ft.)	Red, Orange, Yellow, Green, Blue



Horizon™ Ribbon Subdermal Needle Electrodes

Flexible, tangle-free parallel lead wires that come in color-coded ribbons of 3-10 leads

Convenient and easy to use. Flexible, tangle-free parallel lead wires. Ribbon wires can be pulled apart, separating wires to desired lengths. Decrease excessive package waste. Sterile. Needle diameter: 27 ga. (0.4 mm). Single patient use only.

Part Number	# of Wires	Needle Length	Quantity/Box	Lead Length	Lead Color Scheme	Typical Use
NS-S85015-R5-10	5	13 mm	10/box	1.5 m (5 ft.)	Red, Yellow, Green, Blue, White	Head
NS-S86015-R1-10	6	13 mm	10/box	1.5 m (5 ft.)	Red, Yellow, Green, Blue, White, Black	Head
NS-S86020-R1-10	6	13 mm	10/box	2.0 m (6.5 ft.)	Red, Yellow, Green, Blue, White, Black	Head
NS-S86025-R1-10	6	13 mm	10/box	2.5 m (8 ft.)	Red, Yellow, Green, Blue, White, Black	Head
NS-S96315-R1H-10	6	12 mm, Bent	10/box	1.5 m (5 ft.)	Red, Yellow, Green, Blue, White, Black	Head
NS-S96072-R-10	6	13 mm	10/box	1.8 m (6 ft)	Red, Orange, Green, Blue, White, Black	Head
NS-S88015-R2-10	8	13 mm	10/box	1.5 m (5 ft.)	Pink, Red, Yellow, Green, Blue, White, Black, L. Blue	Head & Erbs
NS-S80025-R10W-8	10	13 mm	8/box	2.5 m (8 ft.)	Red-White, Orange-White, Yellow-White, Green-White, Blue-White	Extremities
NS-S80025-R10B-8	10	13 mm	8/box	2.5 m (8 ft.)	Red-Black, Orange-Black, Yellow-Black, Green-Black, Blue-Black	Extremities
NS-S83018-R9-10	3	13 mm	10/box	0.5 m (1.5 ft.)	Red, Black, Green	Research



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Horizon™ MultiLead™ Twisted Subdermal Needle Electrodes

Save time in the OR without compromising sterility!

Convenient and easy to use. Incredibly tight twisting. Plastic slide can be adjusted, separating wires to desired lengths. Sterile. Needle diameter: 27 ga. (0.4 mm). Single patient use only.

Part Number	Number of Leads	Lead Colors	Lead Length	Package Size
NS-S85015-T5-10	5 Leads	Red, Yellow, Green, Blue, White	1.5 m	10 pack
NS-S86015-T1-10	6 Leads	Red, Yellow, Green, Blue, White, Black	1.5 m	10 pack
NS-S85025-T5-10	5 Leads	Red, Yellow, Green, Blue, White	2.5 m	10 pack



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Technomed Corkscrew Electrodes

Flexible grip makes electrode easy to handle and insert. Can be used for both recording and stimulating. Sterile. Needle diameter: 23 ga. (0.6 mm). Single patient use only.

Part Number	Lead Colors	Wire Length	Quantity/Package
NS-105115-24	Red, Yellow, Green, Blue, White, Black	1.2 m	24/box



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Lead Extenders



Part Number	Description	Quantity/Package
AC-201015	Lead Extender - 1.5 meter lead length	10/pack
AC-201020	Lead Extender - 2.0 meter lead length	10/pack
AC-201025	Lead Extender - 2.5 meter lead length	10/pack



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Premium SurePoint™ Single Subdermal Needles

Premium conical needles with easy insertion and less bleeding. High quality wires are reliable, durable and flexible for easier and safer insertion and removal of needles. Sterile. Single patient use only.

Part Number	Colors	Gauge (Needle Diameter)	Needle Length	Wire Length
NS-S0013315-20	10 colors (20/pack) Red, Yellow, Green, Blue, White, Black, Brown, Orange, Purple, Gray	27 ga. (0.40 mm)	13 mm (0.5")	6 ft. (1.8 m)
NS-S02918-P-20	All Purple (20/pack)	29 ga. (0.30 mm)	13 mm (0.5")	18" (0.5 m)
NS-S02918-B-20	All Black (20/pack)	29 ga. (0.30 mm)	13 mm (0.5")	18" (0.5 m)



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Neurovision™ Dragonfly® Laryngeal Electrodes and Cobra® ET Tube

Several different inner diameter (ID) sizes. Sold 5 per box. 10 color assortment packages. Sterile. Single patient use only.



Dragonfly® EMG Electrodes

Part Number	Channel(s)	Tube Size
AC-LSE500MS-5	1	6.0 - 7.0 ID
AC-LSE500M-5	1	7.5 - 10 ID
AC-LSE500DCS-5	2	6.0 - 7.5 ID
AC-LSE500DCL-5	2	8.0 - 9.5 ID



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Lantern Laryngeal Electrodes



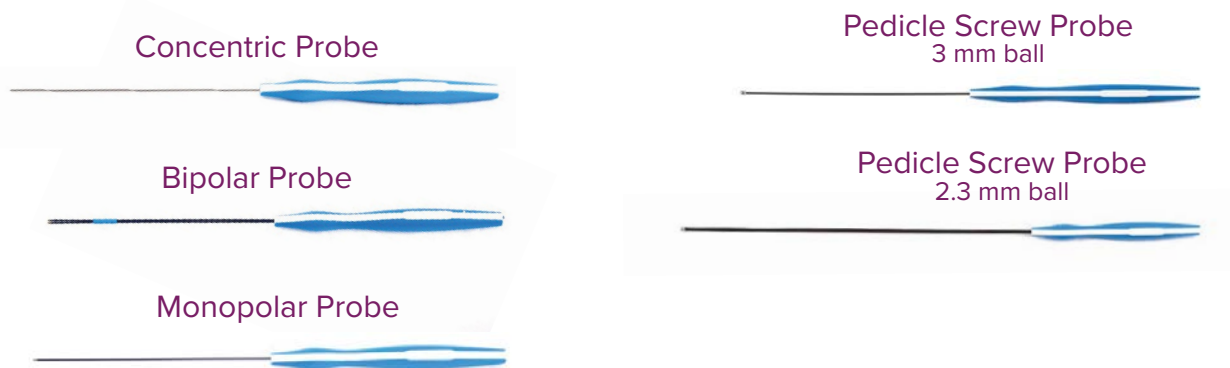
Part Number	Probe Type	Description	Quantity/Package
SP-420000	Lantern Laryngeal	Disposable, 8/9 mm, includes cable	10/box
SP-420100	Lantern Laryngeal	Disposable, 6/7 mm, includes cable	10/box



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Stimulating probes are designed to stimulate nerves during surgery. A variety of probes are available to allow coarse or precise stimulation. All probes terminate with DIN 42802 touch proof connectors, and may be used with any compatible and appropriate nerve monitor or stimulator. Sold 10 per box unless otherwise specified. Sterile. Single patient use only.



Part Number	Probe Type	Description
SP-360300	Pedicle Screw 3 mm	Disposable, 3 mm ball, 100 mm x 0.75 mm electrode, 1.9 m lead
SP-400800	Pedicle Screw 2.3 mm	Disposable, 2.3 mm ball, 130 mm x 1.9 mm electrode, 1.9 m lead
SP-360200	Monopolar	Disposable, 100 mm x 0.75 mm electrode, 1.9 m lead
SP-360000	Concentric	Disposable, 100 mm x 1 mm electrode, 1.9 m leads
SP-360100	Bipolar	Disposable, 2 x 100 mm x 0.75 mm electrodes, 1.9 m leads
SP-400300	Hooked Triple	Disposable, 3 x 38 mm, hook length: 2.4 mm, outer hooks 5 mm, sold individually
SP-400900	Hooked Double	Disposable, 3 x 38 mm, hook length: 2.4 mm, outer hooks 3 mm, sold individually
SP-400600	Pedicle Screw Probes	Disposable, 200 mm x 1 mm, 3 mm ball, 1.9 m leads
SP-401600	Kartush Curved Needle	Disposable, 167 mm x 14 mm, .38 mm, 1.9 m leads
SP-401700	Kartush Elevator	



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SlideShaft® Adjustable Shaft Length Neuro-Stimulating Probe

Disposable probe. Adjustable shaft length of 130mm to 270mm. 1.9m wire with DIN 42802 connector.

Part Number	Probe Type	Quantity	Price
SP-NP001	0.2mm flush tip; 2.2mm shaft	5 per box	\$390.00 box
SP-NP002	2.3mm ball tip	5 per box	\$390.00 box



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PSG: Progress helps millions of patients rest easier

PSG TRENDS

PSG is used to diagnose health issues associated with sleep including insomnia, restless leg syndrome, narcolepsy and sleep-related breathing (SRB) disorders such as obstructive sleep apnea (OSA). Multiple physiological parameters are measured during sleep: EEG, EMG, limb movements, oral and nasal airflow, oxygen saturation (SpO2), body positions and cardiac rhythm disturbances. REM incursions and other variables to determine an accurate sleep disorder diagnosis.

Trends associated with PSG include:

- Greater use of lighter weight, more flexible materials and components for patient comfort.
- A continued increase in unattended at-home sleep studies, which grew from 0.9% in 2000 to 12% in 2014.³ The number is expected to grow further due to lower costs and the higher reliability of tests conducted in a patient's usual sleep environment.
- The ability to reduce the number of sensors due to novel materials like PVDF, which allows vibration (snoring), temperature and pressure (airflow) detection all in one sensor.
- More sophisticated mathematical algorithms integrate all sensed variables contributing to better automatic hypnograms and faster results.
- Increase in use of disposable components for infection control purposes.
- Increased PSG testing as the U.S. population ages and obesity increases; both of these patient populations are more susceptible to SRB and OSA.



A BRIEF HISTORY of polysomnography (PSG)

- 1937: Loomis first documents EEG patterns associated with NREM (non-rapid eye movement).¹
- 1951: Kleitman and Aserinsky study eye movements during sleep.¹
- 1953: Kleitman and Aserinsky publish a paper on a new sleep state: rapid eye movement (REM).¹
- 1957: Dement and Kleitman propose a new classification of sleep stages using four stages of NREM and REM sleep.¹
- 1966: Gastaut et al. monitor patients with nocturnal breathing disruptions using PSG, leading to the discovery of OSA.¹
- 1970: A full-service Sleep Center is established at Stanford University, which includes the ability to perform nocturnal PSG.¹
- 1978: The first clinical PSG exam was given in Cincinnati.¹
- Beginning in the 1980s, PSG became the chief diagnostic method for recognizing sleep-related disorders.²
- In 2014, 845,569 sleep studies were completed by 1.4% of Medicare beneficiaries in the U.S. at a cost of \$189 million.³



See more

COMMON PSG CHALLENGES AND SOLUTIONS

Some of the more common challenges that sleep technicians face in their day-to-day practice are noted below, along with potential solutions.

CHALLENGE	POTENTIAL SOLUTION	RATIONALE
Electrodes/sensors fail to record properly	Use additional channels for redundancy, per AAST recommendations	<ul style="list-style-type: none"> To evaluate waveforms, the American Association of Sleep Technologists (AAST) recommends placing a single central channel referenced to an ear mastoid site (C4-M1), a single frontal channel referenced to an ear mastoid site (F4-M1) and a single occipital channel referenced to an ear mastoid site (O2-M1). Use of additional channels (C3-M2, F3-M2, O1-M2) provides redundancy in case of electrode malfunction.⁴
Calibrating multiple sensors prior to the study initiation	Multi-measure sensors	<ul style="list-style-type: none"> Newer technologies can reduce the number of sensors required by combining recording multiple measures—e.g., temperature, pressure and snoring—simultaneously via one sensor
Obtaining optimal signal-to-noise ratios	Consider newer technologies and materials	<ul style="list-style-type: none"> PVDF, a material long used in healthcare but more recently deployed in PSG applications, is more sensitive than other materials. For example PVDF airflow monitors respond to changes in 3 milliseconds compared to traditional thermocouples/thermistors, which can require up to 5 seconds of response time, potentially missing information.⁵
Patient comfort: with airflow sensors requiring cannulas under CPAP masks and with multiple and/or bulky sensors	Use airflow sensors that do not require cannulas and consider sensors that measure multiple signals in one sensor	<ul style="list-style-type: none"> Some currently available airflow sensors function without cannulas, helping improve patient comfort Thinner “no-casing” (no external case) airflow monitors are useful in titrating CPAP masks while improving patient comfort PVDF is more flexible than traditional materials
Potential cross-contamination from reusable equipment	Switch to single-patient use components	<ul style="list-style-type: none"> Airflow monitors and direct skin contact sensors such as respiratory effort belts are available as single-patient use products
Lack of readily available respiratory effort belts to fit patient abdominal/thoracic measurements	Use cut-to-size belt straps	<ul style="list-style-type: none"> Cut-to-size belts allow for an accurate fit and are typically disposable so no additional cleaning is required
Institutional ability to upgrade products due to cost or availability	Consider newer PVDF products	<ul style="list-style-type: none"> Respiratory inductance plethysmography (RIP) technology is typically more expensive than PVDF-based products, which have been found to be as reliable as RIP U.S.-made products may be more readily available during COVID-related supply chain challenges

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Disposables PVDF Snoring Microphone

Very sensitive: picks up both sound and vibration. 1.25" microphone diameter, 6 ft. (1.83m) wire. Non sterile.



Part Number	Description	Price
SM-10210010610	Accusnore Sensor, Disposable, Large, 10/pack	\$95.00
SM-12200010001	Accusnore Reusable interface cable	\$125.00



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PVDF XM Extremity Movement Sensor

Picks up snoring vibrations. Compact, low-profile design. 3/4" (19mm) sensor diameter.



Part Number	Description	Price
SM-13500000010	PVDF XM Extremity Movement Sensor, Disposable, 10/pack	\$95.00
SM-12101800001	XM Extremity Movement Interface Cable	\$120.00



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No Casing MultiFlow™ Respiration Monitors

- Versatile, ideal for use under C-PAP/BiPAP mask or with cannulas
- Easily allows separate recording from nasal/oral passages.
- Thermocouples are small, yet incredible durable
- Can be use on any sized patient
- Dual monitor allows multiple recordings on single channel



Part Number	Description	Price
SM-602548	Single Channel (2 plugs, 1 channel)	\$70.00
SM-602353	Dual Thermocouple (2 plugs, 1 channel)	\$100.00



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PP-702347-3	8 oz. Jars (3/box)	\$38.22 box	\$36.30 box	\$34.27 box
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Elefix V Conductive Paste

Part Number	Product Size & Box Quantity	Price
PP-ZV181 E10	180g Tube (10/box)	\$171.60 box
PP-ZV401 E03	400g Tube (3/box)	\$130.00 box



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PP-12-08	Spectra® 360 Electrode Gel (Salt Free)	250g Tube (12/box)	\$40.56 box



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Blunted Needles

Stainless steel, 1" (25mm) length. Attach to syringes to inject conductive gel into electrodes



Part Number	Gauge (Tip Diameter)	Package Size	Price
AC-000440-200	19 ga. (1.00 mm) dark brown	200/pack	\$87.36 pack
AC-000442-200	18 ga. (1.27 mm) light pink	200/pack	\$87.36 pack



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Electrode Applicator

For use with any low volume air supply. Keeps electrode in place while evenly dispersing air to dry collodion.

Part Number	Description	Price
AC-501500	Electrode Applicator	\$71.76 each



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Transpore™ Surgical Tape & Cover-Roll™ Stretch Bandage



Part Number	Description	Length	Quantity	Price
AC-451115	Transpore™ 1" - clear and porous	10 yds (9.2 m)	12 rolls/box	\$29.12 box
AC-777200	Cover-Roll™ stretch bandage 2" wide adhesive back, can be cut to size	10 yds (9.2 m)	1 roll	\$12.48 roll



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Aids for Application and Clean Up



Part Number	Description	Quantity	Price
AC-200600	Cotton Tip Applicators Single Ended - 6" handle	100 pack	\$2.08 pack
AC-057000	Gauze Squares 2" x 2" - Non-Sterile	200 pack	\$4.16 pack



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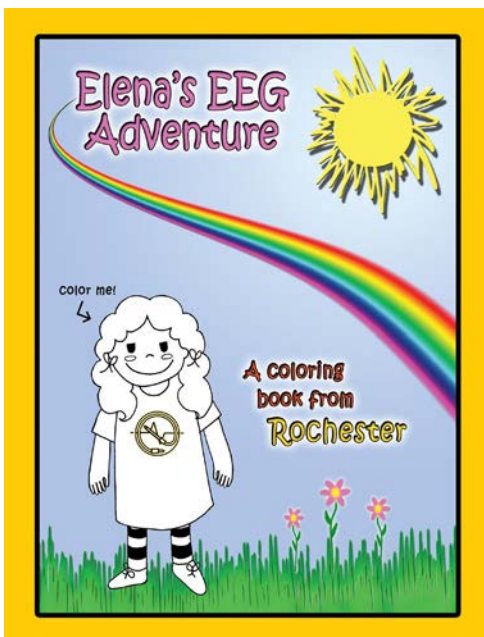
Elena Electrode™ Dolls

Each doll has real EEG cup electrodes attached to the head using Velcro brand fasteners, allowing children to “play EEG/Sleep Tech” while waiting for a test or having a test run. Flat, laminated, printed color cards — 4 dolls per set. Provides a simple and colorful demonstration tool. Helps to make children less fearful and more relaxed.

Part Number	Description	Quantity	Price
AC-400412-0	Elena & Eddie Electrode Doll Variety Pack	1 of each - 4 in pack	\$35.00 pack



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Elena's EEG Adventure Coloring Book

Elena's EEG Adventure is a 12-page coloring book that illustrates an EEG study from a child's perspective. Helps familiarize the child and parent prior to an EEG. Great for waiting rooms or as a distraction during hook-up. Illustrations include integral steps of EEG preparation and testing.

Part Number	Description	Quantity	Price (1-9 pkg)	Price (10-19 pkg)	Price (20+ pkg)
AC-4010EN	12 Page EEG Coloring Book	10/pack	\$10.00/pack	9.00/pack	\$8.50/pack



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PRODUCT INFORMATION

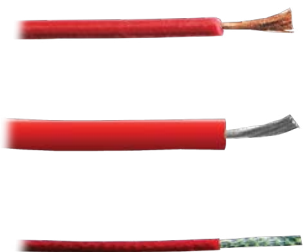
Quality and innovation at our core

Rochester Electro-Medical (now LifeSync Neuro) was founded in 1960. As the practice of neurodiagnostic medicine has grown and advanced, so have the solutions we provide. Today, LifeSync uses innovative materials and cost-effective production to deliver a comprehensive range of reliable, affordable neurodiagnostic products and accessories. We have the deep expertise to address your needs today and into the future.

Types of Electrode Wire

Electrodes are made from three different kinds of wire insulation - PVC, Silicone, and Kevlar®.

- PVC wire looks and feels like flexible plastic. It is lightweight, easy to clean, and can be made into ribbons of colored wire. It has a maximum temperature of 100° C, so it should not be autoclaved.
- Silicone wire looks and feels like rubber. It is smooth, extremely flexible, and has a maximum temperature of 150° C. It is heavier and thicker than PVC or Kevlar® insulation.
- Kevlar® wire is thinner and slightly less flexible than PVC or silicone. The wire contains extremely strong para-aramid fiber that makes these electrodes very durable and hard to break. The PTFE coating on these wires is very smooth and has a maximum temperature of 150° C. Kevlar® coated leads are the strongest wires available.



Needles, Electrodes and Measurements



English and Metric Conversions			
0.5" = 12 mm	1.0" = 25 mm	24" (2 ft) = 0.6 meters	60" (5 ft) = 1.5 meters
1.25" = 32 mm	1.5" = 37 mm	36" (3 ft) = 0.9 meters	72" (6 ft) = 1.8 meters
1.6" = 41 mm	2.0" = 50 mm	48" (4 ft) = 1.2 meters	90" (7.5 ft) = 2.3 meters
2.5" = 65 mm	3.0" = 75 mm	96" (8 ft) = 2.4 meters	120" (10 ft) = 3.1 meters
4.0" = 101 mm	6.0" = 152 mm	60" (5 ft) = 1.5 meters	98.4" (8.2 ft) = 2.5 meters

English / Metric conversions in this catalog are approximate

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Quantity	REF #	Description	Price	Ext. Cost

For your first order please include your credit card number, expiration date & security code.

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Card Holder's Name: _____

Expiration Month/Year: _____ Security Code: _____

Card Holder's Signature: _____

Phone Number: () _____

Fax Number: () _____

Credit Card Billing Zip Code: _____

Type of Business (check one):

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Distributor ☐ (Please List Tax Exempt Number: _____)

Other ☐ Specify: _____

Sub-Total: _____

Shipping: _____
(we will provide a quote)

Sales Tax: _____
(FL only)

Total: _____

Desired Shipping Method
(check only one box)

Ground ☐

2 day ☐

3 day ☐

Overnight ☐

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