Starboard Medical

Temperature Monitoring Devices

STARBOARD MEDICAL

Starboard Medical's line of temperature monitoring probes and sensors are made with patient care in mind.

There is a steadily increasing need for temperature management.

Globally, 234 million major surgeries occur each year where the use of a temperature probe is recomended.[1,2]

Guidelines require monitoring of patient temperature during anesthetic procedures where a change in body temperature is intended, anticipated, or suspected.[2,3]

Elevated core temperature is the first sign of a MH episode and during a MH episode, a patient is 13.8% more likely to die if core body temperature is not measured.[3]

Surgical patients are at risk when their temperature fluctuates.

Hypothermia

Hypothermia is extremely common during surgery. Hypothermia can cause increased oxygen consumption, increased cardiac output, shivering and pain, increase in wound infection, delayed wound healing, and delayed discharge.

Hyperthermia

Hyperthermia happens less frequently, and when malignant, can be fatal. Hyperthermia can cause fever, dilated blood vessels, increased circulation, higher heart rate, pain, and significant medical interventions.

64%

of patients become hypothermic during surgery[4]

Standards and Guidelines

WHO

The World Health Organization (WHO) recommends that body temperature should be measured continuously in patients in whom a change is anticipated, intended, or suspected. This can be done by continuous electronic temperature measurement, if available.[5]

MHAUS

The Malignant Hyperthermia Association of the United States (MHAUS) recommends core temperature monitoring for all patients given general anesthesia lasting more than 30 minutes.[6]

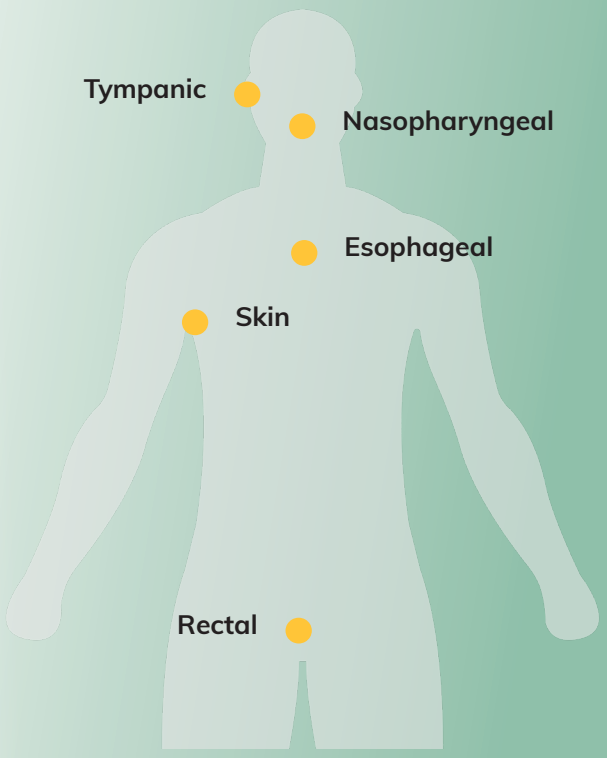
ASA

The American Society of Anesthesiologists (ASA) recommends that every patient receiving anesthesia shall have temperature monitored when clinically significant changes in body temperature are intended, anticipated, or suspected.[2]

AST

The Association of Surgical Technologists (AST) recommends that measures to monitor and maintain body temperature should begin in the preoperative phase and continue into the postoperative phase of the surgical procedure.[7]

Starboard Medical offers a variety of temperature probes and sensors for multiple sites.



40018-ES

Esophageal Stethoscope

Starboard Medical's Esophageal Stethoscope is a dual-purpose device that monitors both core body temperature and auscultation of heart and lung sounds.

Better for the Patient

- Beveled tube tip helps reduce the risk of balloon tears and esophageal irritation
- Heat bonded balloon-to-tube weld softens rough edges to help reduce irritation risk
- PVC tube is formulated to provide the ideal amount of stiffness and pliability
- Long lead wire keeps the connection to the cable away from the patient's face

Better for the Clinician

- Specifically formulated balloon material helps to optimize acoustic sound transmission
- Standard male Luer for an easy-fit connection to an anesthesiologist's earpiece tubing
- Insert-molded, moisture-resistant connector helps reduce the risk of liquid interference
- Non-slip grip notches on the connector for easy handling
- Compatible with most patient/temperature monitors

Catalog No.	Description	Size
4009-ES	Esophageal Stethoscope with 400 Series Thermistor	9F
40012-ES	Esophageal Stethoscope with 400 Series Thermistor	12F
40018-ES	Esophageal Stethoscope with 400 Series Thermistor	18F
40024-ES	Esophageal Stethoscope with 400 Series Thermistor	24F
30 Units Per Box		

Esophageal Stethoscope in use.

Scan or click to watch video

General Purpose Temperature Probe

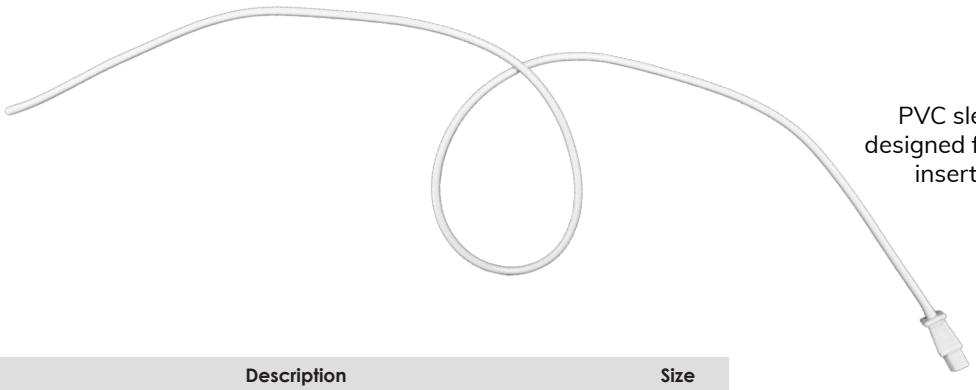
Starboard Medical's General Purpose Temperature Probe is versatile and accurate. It can be used to measure temperature at a variety of sites.

Better for the Patient

- Beveled tube tip is designed to help reduce irritation risk during insertion and removal
- Tip to end PVC sleeve creates a smooth exterior for added comfort and protects the lead wire from strain, breaks, and interference from ambient air

Better for the Clinician

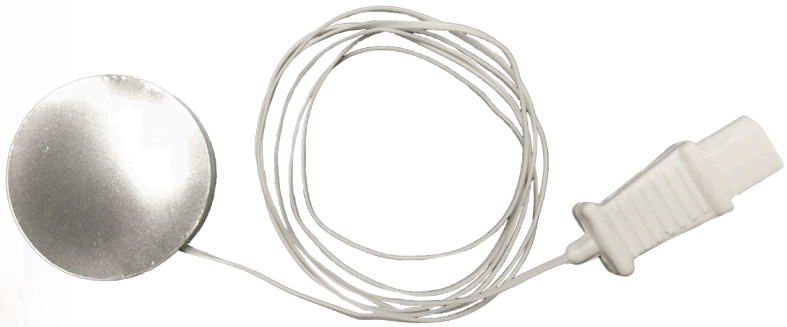
- FDA 510 (k) clearance for nasal, rectal, and esophageal placement
- Insert molded, moisture-resistant connector helps reduce the risk of liquid interference
- Non-slip grip notches on the connector for easy handling
- Compatible with most patient/temperature monitors



PVC sleeve is tip-to-end, designed for more comfortable insertion and removal

Catalog No.	Description	Size
4009-ER	General Purpose: Esophageal/Rectal Probe with 400 Series Thermistor	9F
40012-ER	General Purpose: Esophageal/Rectal Probe with 400 Series Thermistor	12F
	35 Units Per Box	

Scan or click to watch video



400-SK

Skin Temperature Sensor

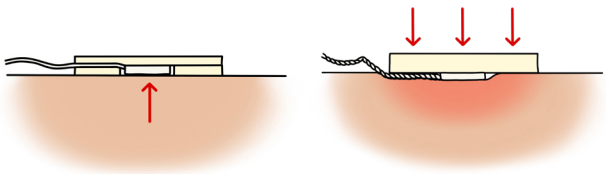
Starboard Medical's Skin Temperature Sensor is safe, comfortable, and accurate. It can be used at multiple sites on the body.

Better for the Patient

- Adhesive on the soft foam comfortably attaches to the patient's skin
- Sensor is embedded into the foam to help reduce risk of pressure points on the skin surface
- Design dissuades off-label use by embedding the sensor

Better for the Clinician

- Reflective Mylar backing insulates the sensor to enhance accuracy
- Insulated 36 gauge lead wire helps reduce ambient influence on the temperature reading
- Non-slip grip notches on the connector for easy handling
- Insert molded, moisture-resistant connector helps reduce the risk of liquid interference
- Compatible with most patient/temperature monitoring devices

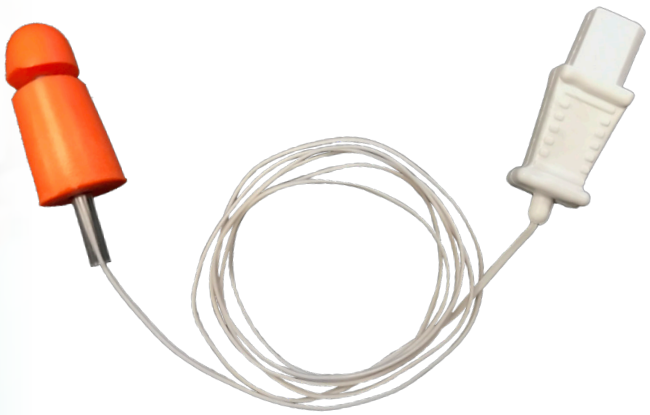


Starboard's Sensor **Competitor's Sensor**

Unlike the competitors, Starboard embeds the thermistor sensor in between two layers of foam to help reduce the risk of pressure injury and off-label use.

Catalog No.	Description	Size
400-SK	Skin Temperature Sensor with 400 Series Thermistor	One Size
	50 Units Per Box	

Scan or click to watch video



400-TY

Tympanic Temperature Sensor

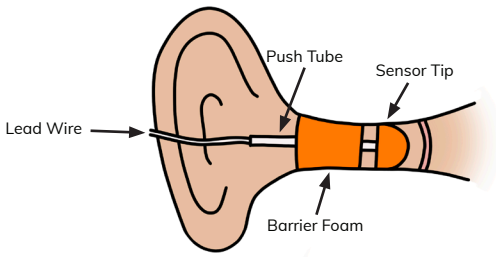
Starboard Medical's Tympanic Temperature Sensor is safe, comfortable, and accurate. This is a great option for monitoring core body temperature when a laryngeal mask is used.

Better for the Patient

- Sensor tip is encapsulated in soft memory cell foam
- Barrier foam collapses and expands to fit comfortably in the ear canal, providing a tight seal for accurate temperature monitoring
- Long lead wire keeps the connection to the cable away from the patient's face

Better for the Clinician

- Push tube acts as a strain relief and aids in insertion and removal
- Insulated 36 gauge lead wire helps reduce ambient influence on the temperature reading
- Non-slip grip notches on the connector for easy handling
- Insert molded moisture-resistant connector helps reduce the risk of liquid interference
- Compatible with most patient/temperature monitors



The barrier foam collapses and expands to universally fit the ear canal and provide a tight seal. The tip of the temperature sensor is embedded in the secondary foam to cushion the sensor.

Catalog No.	Description	Size
400-TY	Tympanic Temperature Sensor with 400 Series Thermistor	Adult
400-TYP	Tympanic Temperature Sensor with 400 Series Thermistor	Pediatric
	50 Units Per Box	

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Starboard Medical

Temperature Monitoring Devices

Starboard Medical's Temperature Monitoring Devices are available directly through Starboard Medical or through your preferred distributor.

Please contact Starboard Medical for further product information, pricing, or samples. Visit **starboardmedical.com/temperature-management** for more information and resources.

Scan to learn more about Starboard probes, request samples, or view the cable/monitor compatibility chart

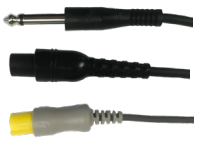
Temperature Probes and Sensors

Catalog No.	Description	Size	Quantity / Box
4009-ES	Esophageal Stethoscope with 400 Series Thermistor	9F	30
40012-ES	Esophageal Stethoscope with 400 Series Thermistor	12F	30
40018-ES	Esophageal Stethoscope with 400 Series Thermistor	18F	30
40024-ES	Esophageal Stethoscope with 400 Series Thermistor	24F	30
4009-ER	Esophageal/Rectal Probe with 400 Series Thermistor	9F	35
40012-ER	Esophageal/Rectal Probe with 400 Series Thermistor	12F	35
400-SK	Skin Temperature Sensor with 400 Series Thermistor	One Size	50
400-TY	Tympanic Temperature Sensor with 400 Series Thermistor	Adult	50
400-TYP	Tympanic Temperature Sensor with 400 Series Thermistor	Pediatric	50

Connecting Cables

Reusable, 400-series thermistor connecting cables provide the interface between the disposable temperature probes and the patient temperature monitor or hypo-hyperthermia machine.

Catalog No.	Description	Size	Quantity / Box
C400MP-M	Reusable Connecting Cable for Use with 400 Series Monitors (Standard 1/4 in Phone Plug)	10 ft.	10
C400P-M	Reusable Connecting Cable for Use with 400 Series Monitors (HP/Philips Rifle Shot Plug)	10 ft.	10
C400MR	Reusable Connecting Cable for Use with 400 Series Monitors (MindRay Plug)	10 ft.	10



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