Edge-to-Edge Coverage, better clinical decisions.
During therapeutic procedures, esophageal temperatures can change quickly. The new and improved S-CATH provides faster, more accurate temperature detection.

- Soft, flexible self-expanding probe conforms to esophageal shape
- Proprietary sensor construction ensures rapid temperature transfer
- Delivers 240 data points per second; 12 temperature sensors update 20 times per second
Rapid, Responsive, Continuous Monitoring Software

Continuous monitoring software is highly accurate in both hot and cold (down to 0°C) temperatures.¹

• Four, user-selectable low and high temperature alarms
• Visual alarms for enhanced recognition
• Graphic and numeric temperature display
• Temperature log retains highest and lowest temperatures
• Conveniently record data for research

Stationary Placement

Sensor placement ensures proximity to the point of treatment; no need to move the probe once placed.

• Radiopaque shaft provides a visual landmark of the esophagus
• Indicates esophageal width and orientation
• Facilitates reduced use of fluoroscopy
The S-CATH, with its unique S-shaped design, deploys an array of 12 temperature sensors throughout the length and width of the esophagus, positioning sensors near the source of temperature changes. Independent research has shown that sensor distance has a great effect on temperatures recorded. ²,³,⁴

Average Esophageal Width = 18.9mm

S-CATH M* is designed for 3-D Mapping Systems

- Four electrodes allow imaging on impedance-based 3-D mapping systems
- Electrodes define the distal and proximal ends of the sensor array
- Twelve-sensor array provides temperature coverage without need to reposition
**IN VIVO DATA**

**Faster Detection**

In an independent study of 198 applications in 10 patients, the S-CATH recognized an initial temperature rise of 0.2°C 17 seconds faster than a single sensor probe. (13.4±7.5 vs. 30.5±15.4 s; P, 0.001)

**Multiple Sensors**

In the same independent prospective study of 198 applications in 10 patients, a temperature rise of >2.0°C was recorded 40 times by the S-CATH. Single sensor probes missed 90% of those temperature rises.

**BENCH DATA**

**Earlier Detection of a 2°C Rise**

CIRCA S-CATH vs. single sensor 9F esophageal probe simultaneous submersion in warm water bath, representing optimal sensor positioning. Test conducted by CIRCA Scientific.

3X Faster

**TIME (SECONDS) TO DETECT A 2°C RISE**

<table>
<thead>
<tr>
<th></th>
<th>Time (sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCA S-CATH</td>
<td>2.4</td>
</tr>
<tr>
<td>Single Sensor Probe</td>
<td>8.2</td>
</tr>
</tbody>
</table>

**INITIAL TEMPERATURE RISE:**

CIRCA 17 Seconds Faster

S-CATH: Giving you time to respond

**TEMPERATURE RISE >2.0°C RECORDED:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCA S-CATH</td>
<td>40</td>
</tr>
<tr>
<td>Single Sensor Probe</td>
<td>4</td>
</tr>
</tbody>
</table>

**IN VIVO DATA**

**Faster Detection**

In an independent study of 198 applications in 10 patients, the S-CATH recognized an initial temperature rise of 0.2°C 17 seconds faster than a single sensor probe. (13.4±7.5 vs. 30.5±15.4 s; P, 0.001)

**Multiple Sensors**

In the same independent prospective study of 198 applications in 10 patients, a temperature rise of >2.0°C was recorded 40 times by the S-CATH. Single sensor probes missed 90% of those temperature rises.

**BENCH DATA**

**Earlier Detection of a 2°C Rise**

CIRCA S-CATH vs. single sensor 9F esophageal probe simultaneous submersion in warm water bath, representing optimal sensor positioning. Test conducted by CIRCA Scientific.

3X Faster

**TIME (SECONDS) TO DETECT A 2°C RISE**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCA S-CATH</td>
<td>2.4</td>
</tr>
<tr>
<td>Single Sensor Probe</td>
<td>8.2</td>
</tr>
</tbody>
</table>
All products which carry the CE mark comply with Medical Device Directive 93/42/EEC and are manufactured to Quality Systems ISO13485.

This product is listed by CSA International as certified. *Pending 510(K) review. Not available in the United States.

**Indications for Use:** The CIRCA S-CATH Esophageal Temperature Probe is intended for continuous temperature monitoring. The radiopaque probe is designed for placement in the esophagus. The CIRCA Temperature Monitor is indicated to display continuous temperature measurement (°C) from 12-sensor temperature probe.

**Caution:** Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.

1 Accuracy of the temperature sensors is ± 0.3°C within the rated output range of 25°C to 45°C and ± 0.4°C within the rated extended output range of 0°C to 24.9°C.


7 In-house data. Test conducted by CIRCA Scientific.

---

### CIRCA Scientific

**Corporate Office**

14 Inverness Drive East, Suite H-136

Englewood, CO 80112

www.CIRCASCIENTIFIC.com

Office: 1.303.951.8767  •  Fax: 1.303.951.8769

info@circascientific.com

---

U.S. Patents 9,155,476 B2 and 9,668,655

Other U.S. and foreign patents pending.

© 2017 CIRCA Scientific, LLC. All rights reserved.

CS-ART2072 Rev. 02