Shaping Surgical Ablation.

Cardioblate®
Gemini®-s iRF
Surgical Ablation System

Unique system offering the only clamp with a flexible neck for performing MICS ablation on a beating heart.
Beating Heart MICS Ablation.

The outstanding flexibility and control of the Cardioblate® Gemini® Surgical Ablation System enables ease of access, maneuverability and placement for lateral minimally invasive cardiac ablation procedures.  

- Minimally invasive ablation surgery is characterized by two small incisions (right and left mini-thoracotomies) and two small port-sized incisions per side.  
- Therapy is similar to a sternotomy-based approach, but access and visibility are different.  
- Direct vision is supported by endoscopic visualization and is the recommended technique for surgeons learning to perform minimally invasive ablation procedures. As surgeons gain more experience, they may choose to reduce the incision size and move to a completely thoracoscopic approach.  

Important Safety Information

Possible complications related to the ablation of cardiac tissue in combination with cardiac surgery are tissue perforation, extension of extracorporeal bypass, perioperative heart rhythm disturbances (atrial and/or ventricular), postoperative embolic complications, pericardial effusion or tamponade, injury to the great vessels, valve leaflet damage, conduction disturbances (SA/AV node), acute ischemic myocardial event, thrombus formation, nerve damage, unintentional burns, pericarditis, or pleural effusion.
Cardioblate® Gemini®-s
Irrigated Surgical Ablation System

Designed for minimally invasive approaches, the Medtronic Cardioblate® Gemini®-s Surgical Ablation System provides Cardiac Surgeons with the opportunity to experience outstanding flexibility and control during endoscopic stand-alone ablation procedures. Gemini-s combines the efficacy of irrigated RF energy with a lateral approach.

Easy Positioning.
Guides create pathways for the Gemini device to follow, aiding in jaw placement.

Flexible Neck.
For a gentle endoscopic approach to anatomy.

Lateral Approach. Gemini-s features a moderate jaw curve to facilitate a lateral approach with parallel closure that accommodates varying tissue thickness.

QuickConnect guide-jaw system allows fast and easy connection, and removal, of the guides to the device.

Cardioblate Gemini Surgical Ablation Clamp offers a truly unique approach for minimally invasive surgical ablation on a beating heart.

The Gemini-s offers:
• Small size to fit through port-sized incisions
• Flexible neck that allows gentle maneuvering around delicate structures
• Single-handed operation, including trigger-activated iRF delivery
• Jaws close in parallel to accommodate varying tissue thickness
Cardioblate® Gemini®-s
Surgical Ablation Clamp

The only ablation device for lateral approaches.
The Gemini-s surgical ablation device combines irrigated bipolar RF energy in creating transmural lesions with a design that’s truly unique. A moderately curved jaw design facilitates a lateral approach to cardiac ablation procedures.

Cardioblate® 68000 Generator

Real-time feedback, real-time power.
Delivering precise, irrigated RF energy based on tissue requirements is key to achieving transmurality and consistent conduction block. A proprietary bipolar algorithm the Cardioblate 68000 Generator allows for customized energy delivery based on tissue requirements to provide reliable, reproducible transmurality. It delivers consistent power even with high impedance and comes equipped with auto and manual power settings as well as built-in safety features.
**Conduction block confirmation.**

One simple device to confirm conduction block and identify and ablate target cardiac areas. Apply high frequency stimulation (HFS) to areas around the pulmonary vein/atrial junction to identify sites that may contribute to various cardiac arrhythmias. Then ablate the target sites using the same device.

- Integrates cardiac rhythm diagnostics and surgical ablation technologies in one device.
- Sense and pace on a beating heart to confirm transmurality.
- Create any desired lesion on an arrested heart.

Use of MAPS device is optional for Gemini-s device.
Product Ordering Information

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<th>PRODUCT</th>
<th>CATALOG CODE</th>
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<td>Single</td>
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<tr>
<td>Cardioblate® 68000 Generator</td>
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<tr>
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<td>1 each</td>
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<tr>
<td>Cardioblate® MAPS Device</td>
<td>49205</td>
<td>1 each</td>
<td>Single</td>
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</tbody>
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Commerciaally available pressure bag, tubing and normal saline also required.

Disperece electrode required for use with the MAPS device (Model 49205).

Cardioblate® Gemini® Surgical Ablation Device

**Indications:** The Cardioblate Gemini Surgical Ablation Device is intended to ablate cardiac tissue during cardiac surgery using radiofrequency energy. The system is indicated for use under direct or endoscopic visualization, in surgical procedures, including minimally invasive surgical procedures. **Contraindications:** The Cardioblate Gemini Surgical Ablation Device should not be used for patients that have active endocarditis at the time of surgery.

Ablation in a pool of blood (eg, through a purse string suture on a beating heart). Effects of this type of ablation are unknown.

**Adverse Effects:** Possible complications related to the ablation of cardiac tissue in combination with open heart surgery are tissue perforation, extension of extracorporeal bypass, perioperative heart rhythm disturbances (atrial and/or ventricular), postoperative embolic complications, pericardial effusion or tamponade, injury to the great vessels, valve leaflet damage, conduction disturbances (SA/AV node), acute ischemic myocardial event, thrombus formation, nerve damage, unintentional burns, pericarditis, pleural effusion.

Cardioblate® MAPS Mapping, Ablation, Pacing, and Sensing Device

**Indications:** The Cardioblate MAPS Mapping, Ablation, Pacing, and Sensing Device is intended to ablate cardiac tissue during cardiac surgery using radiofrequency energy. **Contraindications:** The Cardioblate MAPS Mapping, Ablation, Pacing, and Sensing Device should not be used for patients that have active endocarditis at the time of surgery. **Adverse Effects:** Possible complications related to the ablation of cardiac tissue in combination with open heart surgery are tissue perforation, extension of extracorporeal bypass, perioperative heart rhythm disturbances (atrial and/or ventricular), postoperative embolic complications, pericardial effusion or tamponade, injury to the great vessels, valve leaflet damage, conduction disturbances (SA/AV node), acute ischemic myocardial event, thrombus formation, nerve damage, unintentional burns, pericarditis, pleural effusion, esophageal perforation.

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