

OptiSense™ Optim™

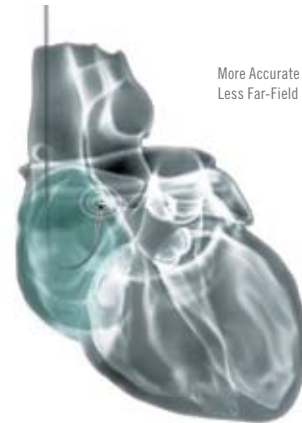
Atrial, Bipolar Pacing Lead
with 1,1 mm Tip-to-Ring Spacing Technology

MODEL 1999



SPECIFICATIONS

- **OptiSense™ Lead Technology: Optimal Tip-to-Ring Spacing:** For physicians who want the assurance that the atrial lead can sense fine atrial arrhythmias without inappropriately sensing extra-atrial signals, the unique 1,1 mm tip-to-ring spacing of the OptiSense™ Optim™ lead (model 1999) offers a more precise measurement of atrial signals when compared with other leads used in the atrium. (Standard atrial leads typically have a tip-to-ring spacing of 10 mm or more.)
- **More Accurate Atrial Sensing.** Due to less far-field interference, OptiSense™ Optim™ lead technology allows increased atrial sensitivity settings and negates the need to use extended blanking periods.
 - In 100% of patients, the atrial sensitivity could be set to 0,3 mV without sensing far-field R waves.*
 - In 90% of patients, the atrial sensitivity could be set to 0,1 mV without sensing far-field R waves.*This enables sensing of even the finest atrial arrhythmia signals.
- **Less Far-Field Interference:** With innovative far-field signal reduction technology, the OptiSense™ Optim™ lead effectively:
 - Reduces paced far-field R waves by 94%.*
 - Eliminates inappropriate mode switching.*Accurate atrial sensing provides appropriate atrial diagnostics and therapies.
- **Optim™ Lead Insulation:** The OptiSense™ Optim™ lead features innovative Optim™ lead insulation, which blends the best qualities of silicone and polyurethane:
 - More control – Flexible Optim™ lead insulation for better lubricity and handling.
 - Less risk – Durable Optim™ lead insulation for abrasion resistance.
- **Superior Helix Performance:** Smooth and consistent helix extension/retraction mechanism featuring a new plastic material (PEEK)—provides more control during the lead implantation process.
- **Thin Lead Body Diameter:** The OptiSense™ Optim™ lead body diameter is only 5,8 F, thus it can be inserted using a 7 F introducer.
 - Small size provides ease of passage and preserves venous space.



More Accurate Atrial Sensing
Less Far-Field Interference

- **Lower Thresholds with Steroid Elution:** The OptiSense™ Optim™ lead is a steroid-eluting lead that uses a monolithic controlled release device (MCRD). The steroid plug is designed to reduce tissue inflammation at the lead-tissue interface. It also promotes low-stimulation thresholds.
- **Reduced Polarisation with Titanium Nitride Fractal Coating:** The tip and ring electrodes of the OptiSense™ Optim™ leads are coated with titanium nitride (TiN). TiN fractal coating is designed to promote precise sensing and to provide improved contact with the myocardium.

* 120 patient multi-center FSR clinical study in Europe - completed 2008: Augustini et al. A novel lead design reduces far field R-waves (FFRWs) and decreases the incidence of inappropriate automatic mode switch episodes. Heart Rhythm Journal 2007; 4 (5S):S129-30.



ST. JUDE MEDICAL™

MORE CONTROL. LESS RISK.

PHYSICAL SPECIFICATIONS

Model	1999
Minimum Introducer Size	7 F
Type of Lead	Active-fixation, bipolar, steroid-eluting, endocardial, atrial pacing lead
Lead Connector	IS-1 bipolar
Lead Lengths	40, 46 and 52 cm
Fixation Mechanism	Extendable/Retractable helix
Lead Body Diameter	0,076"/1,9 mm (5,8 F)
Tip-to-Ring Spacing	1,1 mm
Lead Tip Electrode (Cathode)	Active titanium-nitride-coated Pt/Ir helix (1,8 mm extension)
Tip Electrode Surface Area	6,4 mm ²
Ring Electrode (Anode)	Titanium-nitride-coated titanium ring
Ring Electrode Surface Area	17 mm ²
Mapping	Capable with titanium-nitride-coated Pt/Ir helix
Steroid	< 1 mg dexamethasone sodium phosphate
Inner Conductor/Outer Conductor	MP35N™ coil
Inner Insulation	Silicone rubber
Outer Insulation	Optim™ lead insulation
Lead Body Coating	Fast-Pass™ coating

In Pack

Straight stylets	1 x-soft in lead, 1 x-soft, 1 soft
J-curved stylets	2 soft
Helix extension/retraction clip-on tools	2 clip-on tools

Accessory Kits

Available Separately	Model Number	Compatible Lengths	Description
Stylet Kit	4090 with appropriate length designation	46 and 52 cm	1 fixation tool, 1 clip-on tool, 1 J-shaped soft, 1 x-soft, 1 soft, 1 firm, 1 x-firm
	4091 with appropriate length designation	40, 46 and 52 cm	1 clip-on tool, 1 J-shaped soft, 1 x-soft, 1 soft, 1 firm, 1 x-firm
Locator™ Plus Deflectable Stylet	1281 with appropriate length designation	46 and 52 cm	Disposable implant tool which facilitates precise lead positioning and allows manipulation with one hand
	1292 with appropriate length designation	46 and 52 cm	

Limited Lifetime Warranty

Terms and conditions apply; refer to the warranty for details.

* MP35N is a trademark of STS Technologies, Inc.

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Brief Summary: Prior to using these devices, please review the Instructions for Use for a complete listing of indications, contraindications, warnings, precautions, potential adverse events and directions for use. Devices depicted may not be available in all countries. Check with your St. Jude Medical representative for product availability in your country. Unless otherwise noted, ™ indicates that the name is a trademark of, or licensed to, St. Jude Medical or one of its subsidiaries. ST. JUDE MEDICAL the nine-squares symbol and MORE CONTROL, LESS RISK are trademarks and service marks of St. Jude Medical, Inc. and its related companies. ©2008. St. Jude Medical, Inc. All Rights Reserved.

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