

# EnSite Velocity™

## Cardiac Mapping System

MODEL EE3000



## SPECIFICATIONS

### SYSTEM

- The EnSite Velocity System features an open platform that supports current clinical applications and future system development—it is compatible with most manufacturers' catheters, ablation generators, recording systems and imaging equipment
- Includes the following hardware:
  - Display Workstation
  - Amplifier
  - Optional Accessories

### DISPLAY WORKSTATION

- The EnSite Velocity Display Workstation is the user interface for controlling the EnSite Velocity System and is available in either a mobile (cart) or fixed installation
- The system software (Linux operating system) interprets and graphically displays the data from the EnSite Velocity Amplifier
- (2) Quad core CPU PC, PCI Express graphics, and DVD/CD writer—recording speed determined by media used
- 4 GB main memory
- 1 TB hard drive
  - 400 GB patient data storage
- nVidia Quadro FX video graphics card
- Dimensions:
  - Standalone Workstation: 17.3 H x 6.5 W x 17.3 D inches (44 H x 16.5 W x 44 D cm)
  - Workstation Power Kit: 12 H x 9 W x 4.5 D inches (30.5 H x 23 W x 11.5 D cm)
  - 24 inch (61 cm) LCD High Definition Flat-Panel Monitor (widescreen, 1920 x 1200 resolution, 16:9 aspect ratio): 14.5 H x 22.1 W x 3.6 D inches (37 H x 56 W x 9 D cm)
  - Workstation Cart (Optional): 33.9 H x 24.8 W x 32.7 D inches (86 H x 63 W x 83 D cm)
- Weight:
  - Standalone Workstation: 33 lbs (15 kg)
  - Workstation Power Kit: 19 lbs (8.6 kg)
  - LCD High Definition Flat-Panel Monitor: 19.4 lbs (8.8 kg)
  - Workstation Cart (Optional): 90 lbs (41 kg)
- Keyboard (USB) and mouse (USB, optical with scroll wheel)
- Fiber optic media converter with fiber optic cable

### AMPLIFIER

- The EnSite Velocity Amplifier accepts signals from electrodes connected to the patient, converts these signals to a digital format and sends them to the Workstation for processing
- Either positioned near the patient bedside in a cart installation or it may be placed under the bed in a fixed installation
- Dimensions:
  - Standalone Amplifier: 19.3 H x 18.1 W x 20 D inches (49 H x 46 W x 51 D cm)
  - Amplifier Cart (Optional): 37 H x 24.4 W x 22.8 D inches (94 H x 62 W x 58 D cm)
- Weight:
  - Standalone Amplifier: 68 lbs (31 kg)
  - Amplifier Cart (Optional): 92 lbs (42 kg)

### AMPLIFIER

- Signal Processing Specifications
  - Sampling rate: 2 kHz
  - Gain accuracy:  $\pm 2\%$
  - Input amplitude accuracy:
    - Absolute 10%
    - Channel to channel 5%
  - Resolution: 24 bits
  - Input signal DC offset:  $\pm 1500$  mV
- Safety Specifications
  - Classification: Class II
  - Leakage: Conforms with IEC 60601-1
  - Defibrillator Protection: Conforms to IEC 60601-2-27; Type CF, Type BF; Defibrillator-proof applied parts
  - Isolation: > 4000 volts: > 5000 volts surge
  - Protection against the ingress of water: IPX0

### POWER INPUT

- Input voltage—100, 110/120, 220/240 V ~ 50/60 Hz
- Power inputs (nominal):
  - Display Workstation: 450 W maximum
  - Amplifier: 400 W maximum
- Mode of operation—continuous

### ACCESSORIES

- Color printer (USB enabled)
- Remote monitor options
  - 24 inch (61 cm)—same specifications as Display Workstation monitor
  - 21 inch (53 cm) LCD High Definition Flat-Panel Monitor (1600 x 1200 resolution, 4:3 aspect ratio): 14.2 H x 18.3 W x 2.8 D inches (36 H x 46.6 W x 7 D cm)
    - Weight: 14.1 lbs (6.1 kg)
  - Remote monitor stand (compatible with 24 or 21 inch monitor; additional cable included)
- EnSite Connect<sup>SM</sup> Remote Support
  - Allows for rapid troubleshooting and diagnosis of problems
  - Works over a secure encrypted Internet connection utilizing an outgoing Secure Socket Layer (SSL) connection to the EnSite Connect Servers
  - Various controls have been integrated to regulate how and when EnSite Connect can be used. Supports DHCP as the default for obtaining an IP address
  - The device can also be set up to use a static IP address
  - If a proxy server is required for Internet access, the EnSite Velocity System can use proxy servers supporting basic/digest authentication



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## SYSTEM CONNECTIONS

- Input From Patient
  - ECG: 12 lead – Catheter electrodes: 2 mm patient-safe jacks
  - Ablation catheter: Custom cable assembly
  - EnGuide signal: 8.138 kHz signal to up to four EP catheter electrodes
  - EnSite Array: Custom assembly
- Input From Other Equipment
  - Ablation generator: Custom assemblies

### RecordConnect

- Recording devices can be connected to the EnSite Velocity System via either a tailor-made RecordConnect or Universal Catheter Input Module
- Dimensions: 4 H x 14 W x 5.5 D inches (10.2 H x 35.6 W x 14 D cm)
- Weight: 4 lbs (1.8 kg)
- Multiple RecordConnect modules are available to ensure compatibility with the chosen amplifier
  - St. Jude Medical EP-WorkMate™ Recording System
  - GE CardiLab® IT – Siemens AXIOM Sensis
  - GE Prucka CardiLab® – Bard STAMP™
  - Bard CLEARSIGN™

### CathLink

- Connects catheters to the EnSite Velocity System when a RecordConnect is not used
- Dimensions: 10.5 H x 5 W x 2 D inches (26.7 H x 12.7 W x 5 D cm)
- Weight: 1.5 lbs (0.7 kg)

### GenConnect

- Connects the ablation catheter electrodes to the EnSite Velocity System and isolates the EnSite location signal from the ablation generator
- Dimensions: 3 H x 9 W x 5.5 D inches (7.6 H x 22.9 W x 14 D cm)
- Weight: 1 lb (0.4 kg)
- Tailor-made GenConnect modules are available for most ablation generators
  - St. Jude Medical T Series – Stockert® 70 RF
  - Boston Scientific EPT 1000-XP™ – Medtronic Atakr® II and Maestro 3000™
- The EnSite Velocity System is compatible with cryoablation systems

### NavLink

- Connects the EnSite NavX™ surface electrodes and System Reference patches to the Amplifier; the Aux Reference also plugs into the NavLink module
- Dimensions: 5.5 H x 3.5 W x 2.5 D inches (14 H x 8.9 W x 6.4 D cm)
- Weight: 0.5 lb (0.2 kg)

### ArrayLink

- Connects the data module for the EnSite Array™ catheter and Aux Reference cables to the Amplifier
- Comparable in size and weight to NavLink (shown directly above)

### EnSite NavX™ Navigation and Visualization Technology

- EnSite NavX components—product code 10003331 (small size available outside the United States only—product code 10003333)
  - Set of three pairs of surface patches – Data module
  - System reference patch – 10 ECG electrodes
- Specifications:
  - 10003331:
    - Front and back patches: 7.0 x 4.0 inches (2.8 x 1.6 cm)
    - All others: 4.0 x 2.0 inches (1.6 x 0.8 cm)
  - 10003333:
    - Front and back patches: 4.0 x 4.0 inches (1.6 x 1.6 cm)
    - All others: 2.5 x 2.0 inches (1.0 x 0.8 cm)

### EnSite Array Catheter

- Noncontact, multi-electrode catheter that maps arrhythmias in as little as a single heartbeat and translates the real-time cardiac electrical information into a three-dimensional activation map
- Specifications:
  - Number of electrodes: 64 – Product code: EC1000
  - Length: 49.2 inches (125 cm) – Usable shaft length: 43.3 inches (110 cm)
  - Body size: 9 F – Tip configuration: Atraumatic pigtail
  - Balloon dimensions: 0.7 x 1.8 inches (1.8 x 4.8 cm) – Guidewire compatibility: 0.032 inch extra stiff or 0.035 inch (inner lumen 0.037 inch)

Note: NavLink, ArrayLink and CathLink may be mounted to the patient bedrail via a clamp and mounting bracket available from St. Jude Medical

ACCESS MAPPING AND VISUALIZATION DIAGNOSIS THERAPY MONITORING

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#### Rx Only

**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.

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