

## Flexible defibrillator/monitor with the capabilities you need

The Philips HeartStart XL defibrillator/monitor, at just under 14 pounds, is easily transported throughout the hospital to the site where cardiac care is needed. A combination manual device with automated external defibrillator capabilities, the HeartStart XL enables the first caregiver on the scene, whether an ALS or BLS clinician, to deliver lifesaving defibrillation therapy.

In AED mode, voice prompts and text messages guide BLS users through the defibrillation process, while the HeartStart XL continuously monitors and displays the patient's ECG. Upon the arrival of ALS personnel, the HeartStart XL is easily switched from AED to manual mode, allowing operators to access the unit's advanced therapeutic features such as selectable energy (from 2 to 200 Joules), non-invasive pacing (optional), SpO<sub>2</sub> (optional) and synchronized cardioversion.



### Features

- » Manual and AED operation.
- » ECG monitoring with pads or electrodes.
- » Selectable limits and alarms.
- » Liquid crystal display.
- » 50 mm strip chart printer.
- » Data storage/event summary.
- » Mark events.
- » SMART Biphasic waveform for defibrillation.

### Options

- » Adult paddles with paddle-to-patient contact indicators. Pediatric paddles underneath.
- » SpO<sub>2</sub> pulse oximetry with alarms.
- » Non-invasive pacing.
- » 5-Lead ECG.

### SMART Biphasic Technology

- » Philips' patented SMART Biphasic waveform is clinically proven superior to high-energy, monophasic waveforms for efficacy and for minimizing post-defibrillation heart dysfunction.<sup>1, 2, 3</sup> (see back page)
- » Impedance Compensation: Measures chest impedance and delivers a low-energy shock based on the patient's unique physical requirements.
- » Quick Charging: Charges to highest energy level, 200 Joules, in less than 3 seconds.
- » Synchronized Cardioversion: Philips' SMART Biphasic waveform has undergone clinical testing, demonstrating its effectiveness for cardioversion of atrial fibrillation.<sup>4</sup> (see back page)

### Easy to Use

- » 1-2-3 Operation: Defibrillation is intuitive for all users.
- » AED Mode: Voice and text prompts guide users through the defibrillation process. 150 Joules non-escalating, pre-set energy level.
- » Paddles (optional): Anterior/anterior adult paddles convert to pediatric by removing the outer contacts.
- » Multi-function Defibrillator Pads: Adult and pediatric pads for defibrillation, ECG monitoring, pacing, and synchronized cardioversion.

***Rugged, compact and easy to use***

**The HeartStart XL is designed to withstand the rigors of patient transport and hospital use**

***Data Management and Reporting***

- » All patient data, including continuous ECG and events (i.e., shock and alarms), are stored in the unit's internal memory and on an optional data card. When used with Philips HeartStart Event Review data management software, users can edit, store, and print reports required for quality control and reporting.

***Lightweight, Compact, Durable***

- » *Grab and Go:* Less than 14 pounds (6.35 kg).
- » *Compact:* Easily fits on a standard hospital stretcher.
- » *Rugged:* Withstands the rigors of hospital use and patient transport.

A combination manual device with automated external defibrillator capabilities, the HeartStart XL enables the first caregiver on the scene, whether an ACLS or BLS clinician, to deliver lifesaving defibrillation therapy.



References:

- (1) Bardy GH et al. "Multicenter Comparison of Truncated Biphasic Shocks and Standard Damped Sine Wave Monophasic Shocks for Transthoracic Ventricular Defibrillation". Circulation 1996;94:2507-2514.
- (2) Gliner BE, White RD. "Recurrence of Out-of-Hospital VF Following Low-Energy Biphasic and High-Energy Monophasic Defibrillation Shocks". J American College of Cardiology (Abstract) 1999;33:127A.
- (3) Reddy RK et al. "Transthoracic Ventricular Defibrillation Causes Fewer ECG ST-Segment Changes After Shock". Ann Emerg Med 1997;30:127-134.4.
- (4) Benditt, DG et al. "Biphasic Waveform Cardioversion as an Alternative to Internal Cardioversion for Atrial Fibrillation Refractory to Conventional Monophasic Waveform Transthoracic Shock". Am J Cardiol, December 15, 2001; 88(12):1426-1428.