

# TECHNICAL SPECIFICATIONS\*



## DEFIBRILLATOR

<b>Defibrillator Model</b>	HeartStart Home Defibrillator M5068A
<b>Defibrillator Family</b>	HS1
<b>How Supplied</b>	Defibrillator, carry case, battery, adult SMART pads cartridge, battery, training videotape, scissors, "Quick Start" poster, Owner's Manual, Quick Reference Guide, support program enrollment card, and "Call EMS" reminder phone sticker.
<b>Waveform</b>	Truncated Exponential Biphasic. Waveform parameters adjusted as a function of each patient's impedance.
<b>Energy</b>	Single energy output. Adult: nominal 150 Joules into a 50 ohm load. Infant/Child: nominal 50 Joules into a 50 ohm load. Automatically set based on type of SMART Pads cartridge installed.
<b>Shock-to-Shock Cycle Time</b>	Typically less than 20 seconds.
<b>Protocol</b>	Voice prompts and indicators guide user through protocol. Follows preconfigured settings. Can be modified with HeartStart Event Review software.
<b>Voice Instructions</b>	Detailed voice messages guide responder through use of the defibrillator.
<b>CPR Voice Coaching</b>	Voice instructions in adult and infant/child CPR available at user's option.
<b>Shock Delivery</b>	Via adhesive pads placed on patient's bare skin as illustrated on pads.
<b>Controls</b>	Green cartridge handle, Green On/Off button, Blue i-button, Orange shock button.
<b>Indicators</b>	Ready light; Blue i-button; Caution light.

## PHYSICAL

<b>Size</b>	
Height	2.8" (7 cm)
Width	8.3" (21 cm)
Depth	7.4" (19 cm)
<b>Weight</b>	
With battery and pads cartridge	3.3 lbs. (1.5 kg)
Without battery or pads cartridge	2.4 lbs. (1.1 kg)

## ENVIRONMENTAL/PHYSICAL REQUIREMENTS

<b>Sealing</b>	Drip proof per EN60529 class IPX1. Solid Objects per EN60529 class IP2X.
<b>Temperature</b>	Operating: 32° - 122° F (0° - 50° C) Standby: 50° - 109° F (10° - 43° C)
<b>Humidity</b>	Operating: 0% to 95% relative, non-condensing Standby: 0% to 75% relative, non-condensing
<b>Altitude</b>	Operating: 0 to 15,000 feet Standby: 0 to 8,500 feet >48 hours and 8,500 to 15,000 feet <48 hours
<b>Shock/Drop Abuse</b>	Withstands 1 meter drop to any edge, corner or surface.
<b>Vibration</b>	Meets EN1789 random and swept sine, road ambulance specification in operating and standby states.
<b>EMI (Radiated/Immunity)</b>	Meets EN55011 Group 1 Level B Class B and EN61000-4-3.

## PATIENT ANALYSIS SYSTEM

<b>Patient Analysis</b>	Evaluates patient ECG and signal quality to determine if a shock is appropriate, and evaluates connection impedance for proper defibrillation pad contact.
<b>Sensitivity/Specificity</b>	Meets AAMI DF39 guidelines and AHA recommendations for adult defibrillation (Circulation 1997;95:1677-1682.)
<b>Artifact Detection</b>	The effects of pacemaker artifact and electrical noise are minimized with artifact detection.

## BATTERY (M5070A)

<b>Type</b>	9 Volt DC, 4.2 Ah, lithium manganese dioxide, disposable long-life primary cell.
<b>Capacity</b>	Minimum 90 shocks or 3 hours of operating time.
<b>Install-By Date</b>	Battery is labeled with an install-by date of at least five years from date of manufacture.
<b>Standby Life</b>	Four years typical when battery is installed by the install-by date. (Will power the AED in standby state within the specified standby temperature range, assuming one battery insertion test and no defibrillation uses.)

## SMART PADS

<b>Adult SMART Pads Cartridge</b>	M5071A Defibrillation pads for patients 8 years of age and older or 55 lbs. (25 kg) and over.
<b>Infant/Child SMART Pads Cartridge</b>	M5072A Defibrillation pads for patients under 8 years of age or 55 lbs. (25 kg). Available with a prescription. Talk to your doctor.
<b>Energy Delivered</b>	Adult: nominal 150 Joules into a 50 ohm load. Infant/Child: nominal 50 Joules into a 50 ohm load.
<b>How Supplied</b>	Disposable cartridge, containing adhesive defibrillation pads, clicks into defibrillator for an integrated pads solution.
<b>Active Surface Area</b>	13.2 in <sup>2</sup> (85 cm <sup>2</sup> ) each
<b>Cable Length</b>	Adult pads: 54 inch (137.1 cm) Infant/Child pads: 40 inch (101.6 cm)
<b>Use-By Date</b>	Cartridge is labeled with a use-by date of at least two years from date of manufacture.

## PRACTICE PADS

<b>Adult Practice Pads</b>	M5073A
<b>Infant/Child Practice Pads</b>	M5074A
<b>Function</b>	Special pads place the HeartStart Home Defibrillator into training mode and disable its energy delivery capability. Features 8 real-world training scripts.

## AUTOMATED AND USER-ACTIVATED SELF-TESTS

<b>Daily Automatic Self-tests</b>	Tests internal circuitry, waveform delivery system, pads cartridge and battery capacity.
<b>Pads Integrity Test</b>	Specifically tests readiness-for-use of pads (gel moisture).
<b>Battery Insertion Test</b>	Upon battery insertion, extensive automatic self-tests and user-interactive test check device readiness.
<b>Status Indicator</b>	Blinking green Ready light indicates ready for use.

## DATA RECORDING AND TRANSMISSION

<b>Infrared</b>	Wireless transmission of event data to personal computer using the IrDA protocol.
<b>HeartStart Event Review Software</b>	Data management software "optional" for download and review of data retrieved through defibrillator's infrared data port.
<b>Data Stored</b>	Maximum 15 minutes of ECG and the entire incident's events and analysis decisions.

Refer to HeartStart Home Defibrillator Instructions for Use for detailed product instructions. All specifications based on 25° C unless otherwise noted. The defibrillator and its accessories are made of latex-free materials.

