

HEARTSTART ONSITE DEFIBRILLATOR



For the Ordinary Person in the Extraordinary Moment.

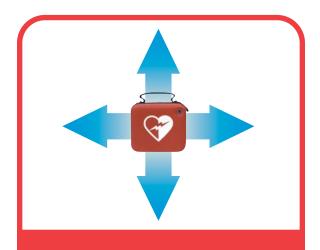




Each year sudden cardiac arrest (SCA) strikes approximately a quarter-million people in the U.S. alone. The majority of these people have no warning, since they show no prior symptoms. And, sadly, fewer than 5% survive, often because emergency medical services cannot reach them in time.

When sudden cardiac arrest strikes, the electrical system of the heart short-circuits, most often causing an abnormal rhythm known as ventricular fibrillation. Lacking proper blood flow, the person loses consciousness, stops breathing, and will die unless promptly treated. CPR (cardiopulmonary resuscitation) can help a person in cardiac arrest, but it alone cannot save lives. A "shock" from a defibrillator – defibrillation therapy – is needed to restore the heart's normal pumping rhythm. A victim's best chance of surviving SCA is to receive that shock within 5 minutes of collapse.





The American Heart Association estimates that an additional 40,000 lives could be saved each year with widespread access to defibrillators.

The Movement to Save More Lives

Over the last 20 years, there has been a widespread effort to move defibrillators into communities where they can be accessed and used by trained citizens, who might be present at the onset of SCA or first on the scene. To that end, Philips produces easy-to-use automated external defibrillators. Our HeartStart defibrillators enable almost anybody to treat SCA quickly and effectively, wherever it happens — at work, at play, in the air — providing the power to save a life.

The HeartStart OnSite Defibrillator

Philips, the leader in defibrillation technology,* designed the HeartStart OnSite Defibrillator for the ordinary person in the extraordinary moment. Our innovative technology, based on extensive research and user feedback, has produced a defibrillator so easy to use that, with minimal training, you can potentially save the life of a co-worker, friend, or anyone else stricken with sudden cardiac arrest.

Weighing just 3.3 lbs., this small and lightweight defibrillator can be easily carried to the patient's side. Using clear, natural voice instructions, the OnSite Defibrillator guides you, the first caregiver on the scene, through each step of defibrillation and CPR. Integrated SMART Pads placed on the patient's bare skin transmit information to the defibrillator, which senses and adapts to your actions every step of the way.

HeartStart OnSite includes proven Philips technologies for heart rhythm assessment (SMART Analysis) and defibrillation energy delivery (SMART Biphasic). And like all HeartStart defibrillators, it can be used to treat infants, children and adults.

Ready When Needed

HeartStart Onsite is powered by a simple, safe, long-life (four-year) battery, the same technology used in cameras. Just click the battery in place, and the defibrillator is standing by, ready for use.

Between uses, the defibrillator performs daily, weekly, and monthly self-tests of its electrical components, subsystems, and battery to help ensure continued reliability and readiness. A pads integrity test, which checks daily that the cartridge is properly installed and that the defibrillator pads are in working order, provides an additional level of assurance.

As long as the green "Ready" light on the defibrillator is blinking, you can be certain the HeartStart OnSite is ready for use. If any part of the defibrillator needs attention, the "Ready" light turns off and the defibrillator "chirps" to alert you. Pressing the flashing blue "Information" button provides verbal guidance to help you identify and correct the situation.

*Frost & Sullivan





HeartStart OnSite Defibrillator is designed to enable you to help save a life in extraordinary circumstances.

- Lightweight: Fully equipped at just 3.3 pounds.
- Intuitive: Clean design and clear voice instructions instill the confidence that's needed when administering therapy to a person in cardiac arrest.
- Ever-Ready: Powered by a long-life (4-year) disposable battery. Automated tests help ensure readiness.
- Versatile: Available for use on anyone of any age, including children and infants.
- Effective: Patented SMART Analysis heart rhythm assessment and SMART Biphasic defibrillation therapy, clinically proven in nearly 10 years of use. No other biphasic waveform is as well documented.

Easy To Use

Using the HeartStart OnSite Defibrillator is simple. Pulling the green handle powers-up the defibrillator and activates voice instructions. These instructions are paced to your actions, to help guide you through the entire process, from placing pads on the patient to delivering a defibrillation shock.

HeartStart OnSite determines if a shock is needed, based on its automated assessment of the victim's heart rhythm:

- If a shock is needed, the defibrillator directs you to press the flashing orange "Shock" button. Then, HeartStart OnSite delivers a dose of low-energy biphasic therapy, a highly effective defibrillation waveform that is also gentle to the heart.
- If a shock is not needed, the OnSite Defibrillator instructs you to assess the patient and to perform CPR when necessary. While performing CPR, the defibrillator's voice instructions can be activated to coach you on the frequency and depth of compressions.

HeartStart OnSite also reminds you to call emergency medical services (EMS). And, should EMS need a summary of care, it can be retrieved from the defibrillator's internal memory. An EMS provider simply presses the "i-button" and HeartStart Onsite verbally recounts events from its last clinical use.

Replaceable SMART Pads Cartridges

The cartridge contains two adhesive pads that are peeled and placed on the patient's bare skin as indicated by the pictures on the pads. The pads are "smart" because they can sense that they have been removed from the cartridge and applied to the patient.



HeartStart OnSite can be used on patients of any age. Special Infant/Child SMART Pads reduce the defibrillator's shock energy, so that you can treat an infant or child suffering sudden cardiac arrest. The Infant/Child Pads cartridge is marked with an indication of the appropriate weight and with a teddy bear icon for ready identification.

To practice your skills, a special training pads cartridge (adult or infant/child) can be installed in the defibrillator. It suspends the defibrillator's ability to shock, while walking you through patient care scenarios.

TECHNICAL SPECIFICATIONS

Meets AAMI DF39 guidelines and AHA recommendations for adult defibrillation (*Circulation* 1997;95:1677-1682).

The effects of pacemaker artifact and electrical noise are minimized

with artifact detection.

Sensitivity/Specificity

Artifact Detection



DEFIBRILLATOR Defibrillator Model HeartStart M5066A Defibrillator Family HS1		ERY (M5070A)	
Detipriliator Family HS1	Туре		9 Volt DC, 4.2 Ah, lithium manganese dioxide, disposable long-life primary cell.
	Capacity	У	Minimum 90 shocks or 3 hours of operating time.
How Supplied Defibrillator, Instructions for Use, battery, cartridge (2), Quick Reference	Install-B	By Date	Battery is labeled with an install-by date of at least five years from date of manufacture.
Waveform Truncated Exponential Biphasic. Wavefor as a function of each patient's impedance		y Life	Four years typical when battery is installed by the install-by date. (Will power the AED in standby state within the specified standby
Energy Single energy output. Adult: nominal 150 Joules into a 50 ohm Infant/Child: nominal 50 Joules into a 50 Automatically set based on type of SMA installed.) ohm load. RT Pads cartridge	RT PADS	temperature range, assuming one battery insertion test and no defibrillation uses.)
Shock-to-Shock Cycle Time Typically less than 20 seconds.	Adult SI	MART Pads	M5071A defibrillation pads for patients 8 years of age and older
Protocol Voice prompts and indicators guide user		je	or 55 lbs. (25 kg) and over.
Follows preconfigured settings. Can be r HeartStart Event Review software.	nodified with Infant/C Cartridg	Child SMART Pads Je	M5072A defibrillation pads for patients under 8 years of age or 55 lbs. (25 kg).
Voice Instructions Detailed voice messages guide responde the defibrillator.		Delivered	Adult: nominal 150 Joules into a 50 ohm load. Infant/Child: nominal 50 Joules into a 50 ohm load.
CPR Voice Coaching Voice instructions in adult and infant/chi user's option.	Id CPR available at	pplied	Disposable cartridge, containing adhesive defibrillation pads, clicks into defibrillator for an integrated pads solution.
Shock Delivery Via adhesive pads placed on patient's ba		Surface Area	13.2 in ² (85 cm ²) each
on pads. Controls Green SMART Pads cartridge handle, Gr	Cable Le	ength	Adult pads: 54 inch (137.1 cm) Infant/Child pads: 40 inch (101.6 cm)
Blue i-button, Orange shock button.	Use-By I	Date	Cartridge is labeled with a use-by date of at least two years from date of manufacture.
Indicators Ready light; Blue i-button; Caution light.			
PHYSICAL	TRAII	NING PADS	
Size Height 2.8" (7 cm)	Adult Tr Cartridg	raining Pads ge	M5073A
Width 8.3" (21 cm) Depth 7.4" (19 cm)	Infant/C Cartridg	Child Training Pads ge	M5074A
Weight With battery and 3.3 lbs. (1.5 kg) pads cartridge	Function	n	Special pads place HeartStart OnSite into training mode and disable its energy delivery capability. Feature 8 real-world training scripts.
Without battery or 2.4 lbs. (1 kg) pads cartridge			
	AUTO	AUTOMATED AND USER-ACTIVATED SELF-TESTS	
ENVIRONMENTAL/PHYSICAL REQUIREMENTS Sealing Drip proof per EN60529 class IPX1.	Daily Au	utomatic Self-tests	Tests internal circuitry, waveform delivery system, pads cartridge and battery capacity.
Sealing Drip proof per EN60529 class IPX1. Solid Objects per EN60529 class IP2X.	Pads In	tegrity Test	Specifically tests readiness-for-use of pads (gel moisture).
Temperature Operating: 32° - 122° F (0° - 50° C) Standby: 50° - 109° F (10° - 43° C)	Battery	Insertion Test	Upon battery insertion, extensive automatic self-tests and user-interactive test check device readiness.
Humidity Operating: 0% to 95% relative, non-cond Standby: 0% to 75% relative, non-conde		Indicator	Blinking green Ready light indicates ready for use.
	DATA	DATA RECORDING AND TRANSMISSION	
Altitude Operating: 0 to 15,000 feet Standby: 0 to 8,500 feet >48 hours and 8,500 to 15,000 feet <48 hours	Infrared	i	Wireless transmission of event data to personal computer using the IrDA protocol.
Shock/Drop Abuse Withstands 1 meter drop to any edge, co	rner or surface. HeartSt	tart Event	Data management software "optional" for download and review of
Vibration Meets meets EN1785 random and swep specification in operating and standby sta	t sine, road ambulance Review	Software	data retrieved through defibrillator's infrared data port. First 15 minutes of ECG and the entire incident's events and
EMI (Radiated/Immunity) Meets EN55011 Group 1 Level B Class			analysis decisions.
PATIENT ANALYSIS SYSTEM			
Patient Analysis Evaluates patient ECG and signal quality is appropriate, and evaluates connection defibrillation pad contact.			



Philips, Leading the Way

Philips, the leader in defibrillation technology, offers a portfolio of resuscitation products to help rescuers treat SCA quickly and effectively wherever it occurs.

Philips automated defibrillators are located in a wide range of settings, such as office buildings, industrial complexes, hospitals, airports and airplanes, resorts, fitness centers, shopping malls and educational facilities.

As the newest addition to the Philips line of defibrillators, HeartStart OnSite optimizes advanced defibrillation technology and makes it available to a broad range of users. Now, this therapy can be seconds away in the home, office, or in any public or private location where people work, live and play.

To learn more about HeartStart OnSite Defibrillator and Philips Medical Systems, visit www.medical.philips.com/cms or call 800-453-6860.



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NOTE: The HeartStart OnSite Defibrillator and some of its accessories are available with a prescription.

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