

# HeartSine® samaritan® PAD 350P AED



- Clinically validated technology
- Two-parts, one expiration date
- Industry-leading environmental protection
- Lightest and most compact AED
- Easy-to-follow visual and verbal guides
- CPR coaching
- Low cost of ownership

## Public Access Defibrillator with CPR Coaching

Sudden cardiac arrest strikes 7 million people a year worldwide with no warning and no pattern. There's little time to react and even less time to think. This means an Automated External Defibrillator (AED) must be close at hand, easy to use and ready to shock.

The HeartSine® samaritan® PAD 350P, a semi-automatic AED, offers industry-leading value and environmental protection, all in an easy-to-operate system in the smallest and lightest package available.

### Ready to Shock

**Portable and lightweight.** The HeartSine samaritan PAD is much lighter (2.4 lbs) and smaller than other defibrillators.

**Highest level of protection against dust and water.** With its IP56 rating, the samaritan PAD 350P defibrillator offers unmatched ruggedness.

### Clinically Validated Technology.<sup>1</sup>

The HeartSine samaritan PAD 350P utilizes proprietary electrode technology and SCOPE™ biphasic technology, an escalating, low-energy waveform that automatically adjusts for differences in patient impedance.

**Adult and Pediatric Patients.** The unique Pediatric-Pak™ ensures the appropriate energy level is delivered for children, between 1 and 8 years of age or up to 55 lbs (25 kg).

### Simple to Own

#### Two parts, one expiration date.

The innovative Pad-Pak,™ an integrated battery and electrode single-use cartridge with pre-attached electrodes and one expiration date, offers one simple maintenance change every four years.

**Low cost of ownership.** With a shelf life of four years from date of manufacture, the Pad-Pak offers significant savings over other defibrillators that require separate battery and electrode replacements.

### Easy-to-Follow Visual and Verbal Guides

**User-friendly.** Easy-to-understand visual and voice prompts guide the rescuer through the entire resuscitation process, including CPR—a key link in the chain of survival.

**Two-button operation.** Only two buttons, ON/OFF and SHOCK, for straightforward operation.

**Always ready.** A System Status Ready Indicator flashes to show that the complete system is operational and ready for use. The device automatically runs a self-check each week.

## SPECIFICATIONS

## DEFIBRILLATOR

**Waveform:** Self-Compensating Output Pulse Envelope (SCOPE) Biphasic waveform. Optimized biphasic escalating waveform compensates energy, slope and envelope for patient impedance.

**Output Energy Sequence:**

- **Energy Default:** 150J, 150J, 200J (adult)  
50J, 50J, 50J (pediatric)

**Shock Advisory System:** The HeartSine samaritan ECG arrhythmia analysis algorithm evaluates patient ECG to ascertain if a therapeutic shock is appropriate. If a shock is required, the device will charge and advise user to press the SHOCK button. If no shock is advised, the device will pause to allow the user to deliver CPR. The ECG arrhythmia analysis algorithm performance has been extensively evaluated by using several databases of real-life ECG traces. Included in this are the American Heart Association (AHA) database and the Massachusetts Institute of Technology MIT – NST database. The ECG arrhythmia analysis algorithm's sensitivity and specificity meet the requirements of IEC/EN 60601-2-4.

**Device Capacity:**

- **Battery capacity (new):** > 60 shocks at 200J or 6 hours of continuous monitoring.
- **Battery capacity (4 years):** > 10 shocks at 200J or 20 minutes of continuous monitoring.

**Shock Charge Time:** Typically 150J in < 8 seconds, 200 J in < 12 seconds.

**Controls:**

- ON/OFF controls device power.
- SHOCK button delivers defibrillation energy.

**Electrical Protection:** Meets IEC/EN 60601-2-4 and IEC/EN 60601-1-2.

**Safety Classification:** Meets IEC/EN 60601-2-4 and IEC/EN 60601-1-2.

## USER INTERFACE

**User Interface:** SAM 350P features easy-to-understand visual prompts, voice prompts and audible tones.

**Status Indicator:** The Status Indicator provides the status of the device:

- A green flashing light indicates the SAM 350P successfully completed its last self test.
- A red flashing light accompanied by an audible beep indicates the SAM 350P failed its weekly self-test or a fault was found when the device was turned on.

- If the status indicator is not lit, the device does not have power (the Pad-Pak is not connected or the battery is completely discharged).

**Low Battery Warning:** A "Warning low battery" message plays when the battery is low. The first time this message is played, the device will continue to function properly, but may have fewer than 10 shocks remaining. Order and replace the Pad-Pak.

**Memory Full Warning:** A "Memory full" message will play when further ECG data or events can no longer be recorded. Clear the memory.

**Temperature Range Warning:** Three audible beeps played rapidly indicate that the ambient temperature is outside of the specified operating range. Return the device to the specified operating temperature.

## ENVIRONMENTAL

**Operating Temperatures:** 32° to 122°F (0° to 50°C)

**Storage Temperatures:** 14°F to 122°F (-10°C to 50°C) for up to two days. Unit must be returned to standby/operating temperature for 24 hours before use.

**Altitude:** 0 feet to 15,000 feet (0 meters to 4,575 meters)

**Relative Humidity:** 5 to 95% (non-condensing)

**Water Resistance:** IEC 60529/EN 60529 IP56

**Shock:** MIL STD 810F Method 516.5, Procedure I (40 Gs)

**Vibration:** MIL STD 810F Method 514.5+  
Category 4 Truck Transportation—US Highways Category 7 Aircraft—Jet 737 & General Aviation (Exposure)

**Falling Height:** 3.5 feet (1 meter)

## PHYSICAL CHARACTERISTICS

**Height:** 1.9 in (4.8 cm)

**Width:** 7.25 in (18.4 cm)

**Depth:** 8.0 in (20 cm)

**Weight:** 2.4 lbs (1.1 kg) including Pad-Pak

## SETUP OPTIONS

**Energy Sequence:** 150J, 150J, 200J

**Energy Protocol:** The device will use the energy sequence 150J-150J-200J.

**CPR Time:** CPR Time can be set to match the local protocol.

**Voice Prompt Volume:** The speaker volume can be changed when connected to a PC.

**Time/Date:** Time and date can be synchronized with local time.

**Device ID:** The serial number linked to the device is printed on all reports.

## ACCESSORIES

**Pad-Pak Electrode and Battery Cartridge**

- **Weight:** 0.44 lbs (0.2 kg)
- **Size:** 3.93 in x 5.24 in x .94 in  
(10 cm x 13.3 cm x 2.4 cm)
- **Replacement:** 4 years after manufacture date.
- **Battery Type:** LiMnO<sub>2</sub> 18V
- **Pads:** HeartSine samaritan disposable defibrillation pads are supplied in the Pad-Pak, which is provided with each device.
- **Pad Placement:** Anterior-lateral (Adult); Anterior-posterior (Pediatric).
- **Pad Active Gel Area:** 15.5 in<sup>2</sup> (100 cm<sup>2</sup>)

**Pediatric-Pak:** For use on children between 1 and 8 years of age or up to 55 lbs (25 kg).

**Aviation Safety Test Pad-Pak (TSO/ETSO-Certified):** RTCA/DO-227 (TSO/ETSO-C142a)

## DATA STORAGE

**Memory Type:** Internal digital memory

**ECG Storage:** 90 minutes of ECG (full disclosure) and event/incident recording.

**Report Types:**

- **Continuous ECG:** Continuous patient ECG report.
- **Continuous Summary report:** Summary of critical resuscitation events and ECG waveform segments associated with these events.
- **Event Log report:** Report of time stamped markers, which reflect operator and device activity.
- **Test Log report:** Device self-test activity report.

**Communications:** Custom USB cable directly connected to a PC and Saver EVO™ Windows®-based data review software.

**Data Review:** HeartSine provides a tool to meet customer needs for data viewing and analysis.

1. Walsh S, McClelland A, Owens, C, et. al. Efficacy of Distinct Energy Delivery Protocols Comparing Two Biphasic Defibrillators for Cardiac Arrest. *Am J Cardiol.* 2004;94:378–380.

All claims valid as of September 2016.

For further information, please contact Physio-Control at 800.442.1142 (U.S.), 888.870.0977 (Canada) or visit our website at [www.physio-control.com](http://www.physio-control.com)



**Physio-Control Headquarters**  
11811 Willows Road NE  
Redmond, WA 98052  
[www.physio-control.com](http://www.physio-control.com)

*Customer Support*  
P. O. Box 97006  
Redmond, WA 98073  
Toll free 800 442 1142  
Fax 800 426 8049

**Physio-Control Canada**  
Physio-Control Canada Sales, Ltd.  
7111 Syntex Drive, 3rd Floor  
Mississauga, ON  
L5N 8C3  
Canada  
Toll free 800 895 5896  
Fax 866 430 6115



HeartSine devices: HeartSine Technologies, Ltd. 203 Airport Road West, Belfast, Northern Ireland, BT3 9ED