

# HeartSine® samaritan® PAD 500P AED

Automated external defibrillator with integrated  
CPR Advisor™

## Data sheet

### Key link in the chain of survival

Cardiopulmonary Resuscitation (CPR) and automated external defibrillators (AEDs) are key links in the chain of survival of sudden cardiac arrest (SCA). Some cardiac events are treatable with effective CPR alone. Others require a combination of effective CPR and the delivery a lifesaving shock by an AED. Either way, every minute counts.<sup>1</sup>

Only about five percent of SCA victims survive.<sup>2</sup> However, survival rates can increase up to 74%<sup>3</sup> if CPR and a shock from an AED are provided within three minutes of collapse. Reducing response time by even one or two minutes from collapse to shock can mean the difference between death and survival.<sup>1</sup>

Offering real-time CPR feedback, the HeartSine samaritan PAD 500P (SAM 500P) automated external defibrillator (AED) with CPR Advisor meets the needs of two key links in the chain of survival. Not only can the SAM 500P deliver a lifesaving shock, it provides real-time visual and verbal feedback to the rescuer on the force and rate of CPR compressions during an SCA resuscitation — effectively assisting the rescuer to perform CPR.



## Real-time CPR feedback



### Integrated real-time CPR feedback

Easy-to-understand visual and voice prompts guide the rescuer through the entire resuscitation process, providing specific feedback on the force and rate of compressions.

## Ready to shock



### Unique Pediatric-Pak

Ensures the guidelines-recommended energy level is delivered for children, between 1 and 8 years of age or up to 25 kg (55 lb).



### High level of protection from dust and water

Offers IP56 rating, one of the highest ratings in the industry.



### Clinically validated technology<sup>4</sup>

Advanced electrode technology and SCOPE biphasic technology, a low energy escalating waveform that automatically adjusts for differences in patient impedance.



### Highly portable

With the lightest weight and most compact footprint among leading AEDs, is easily transported and fit into constrained spaces.

## Simple to own



### Two parts, one expiration date

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



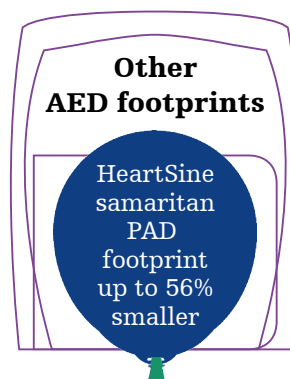
### Low cost of ownership

Shelf life of four years means that the Pad-Pak may offer savings over other defibrillators that require separate battery and electrode replacements.



### 8-year warranty

AED is backed by an 8-year limited warranty.



# Specifications

## Defibrillator

---

**Waveform:** Self-Compensating Output Pulse Envelope (SCOPE) optimised biphasic escalating waveform compensates energy, slope and duration for patient impedance

## Patient analysis system

---

**Method:** Evaluates patient's ECG, electrode contact integrity and patient impedance to determine if defibrillation is required

**Sensitivity/Specificity:** Meets IEC/EN 60601-2-4

**Impedance range:** 20-230 ohms

## Energy selection

---

### Pad-Pak:

Shock 1: 150 J  
Shock 2: 150 J  
Shock 3: 200 J

### Pediatric-Pak:

Shock 1: 50 J  
Shock 2: 50 J  
Shock 3: 50 J

### Charge time (typical):

150J in < 8 seconds  
200J in < 12 seconds

## Environmental

---

### Operating/Standby temperature:

0°C to 50°C (32°F to 122°F)

### Transport temperature:

0°C to 50°C (32°F to 122°F)

NOTE: It is recommended that the device should be placed in an ambient temperature of between 0°C to 50°C (32°F to 122°F) for at least 24 hours upon first receipt.

**Relative humidity:** 5% to 95% non-condensing

### Water resistance:

IEC 60529/ EN60529  
IPX6 with electrodes connected and battery installed

### Dust resistance:

IEC 60529/ EN60529  
IP5X with electrodes connected and battery installed

### Enclosure:

IEC/EN 60529 IP56

### Altitude:

-381 to 4 575 metres  
(-1,250 to 15,000 feet)

### Shock:

MIL STD 810F Method 516.5,  
Procedure 1 (40 G's)

### Vibration:

MIL STD 810F Method 514.5,  
Procedure 1  
Category 4 Truck Transportation – US  
Highways

### Category 7

Aircraft – Jet 737 & General Aviation

**Atmospheric pressure:** 572 hPa to 1060hPa (429 mmHg to 795 mmHg)

**EMC:** IEC/EN 60601-1-2

**Radiated emissions:** IEC/EN 55011

### Electrostatic discharge:

IEC/EN 61000-4-2 (8 kV)

### RF immunity:

IEC/EN 61000-4-3 80MHz-2.5 GHz,  
(10 V/m)

### Magnetic field immunity:

IEC/EN 61000-4-8 (3 A/m)

**Aircraft:** RTCA/DO-160G, Section 21  
(Category M)

RTCA/DO-227 (ETSO-C142a)

**Falling height:** 1 metre (3.3 feet)

## Physical characteristics

---

With Pad-Pak inserted:

### Size:

20 cm x 18.4 cm x 4.8 cm  
(8.0 in x 7.25 in x 1.9 in)

**Weight:** 1.1 kg (2.4 lb)

## Accessories

---

### Pad-Pak Electrode and Battery Cartridge

**Shelf life/Standby life:** See the expiration date on the Pad-Pak/Pediatric-Pak (4 years from manufacture date)

**Weight:** 0.2 kg (0.44 lb)

### Size:

10 cm x 13.3 cm x 2.4 cm  
(3.93 in x 5.24 in x 0.94 in)

**Battery type:** Disposable single-use combined battery and defibrillation electrode cartridge (lithium manganese dioxide (LiMnO<sub>2</sub>) 18V)

### Battery capacity (new):

> 60 shocks at 200J or 6 hours of battery use

**Electrodes:** Disposable defibrillation pads are supplied as standard with each device

**Electrode placement:** Anterior - lateral (Adult)

Anterior - posterior or Anterior - lateral (Pediatric)

**Electrode active area:** 100 cm<sup>2</sup>  
(15 in<sup>2</sup>)

**Electrode cable length:** 1 metre  
(3.3 feet)

### Aircraft safety test (TSO/ETSO-certified

**Pad-Pak):** RTCA/DO-227 (ETSO-C142a)

## Data storage

---

**Memory type:** Internal memory

**Memory storage:** 90 minutes of ECG (full disclosure) and event/incident recording

**Review:** Custom USB data cable (optional) directly connected to PC with Saver EVO Windows-based data review software

## Materials used

---

**Defibrillator housing:** ABS, Santoprene

**Electrodes:** Hydrogel, Silver, Aluminium and Polyester

## Warranty

---

**AED:** 8-year limited warranty

## References

1. Mosesso Jr VN, et al. 2002. Proceedings of the National Center for Early Defibrillation Police AED Issues Forum. *Prehospital Emergency Care*. 6(3):273–82.
2. Mehra R. Global public health problem of sudden cardiac death. *Journal of Electrocardiology*. 2007;40(6):S118-S122.
3. Valenzuela TD, et al. 2000. Outcomes of Rapid Defibrillation by Security Officers After Cardiac Arrest in Casinos. *New England Journal of Medicine*. 343:1206-09.
4. Walsh SJ, McClelland A, Owens CG, 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 June 2021.

For further information, please contact your Stryker representative or visit our website at [strykeremergencycare.com](http://strykeremergencycare.com)

## Emergency Care Public Access


AED users should be trained in CPR and in the use of the AED.

Although not everyone can be saved, studies show that early defibrillation can dramatically improve survival rates. AEDs are indicated for use on adults and children. AEDs may be used on children weighing less than 25 kg (55 lb) but some models require separate defibrillation electrodes.

The information presented is intended to demonstrate Stryker's product offerings. Refer to operating instructions for complete directions for use indications, contraindications, warnings, cautions, and potential adverse events, before using any of Stryker's products. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your representative if you have questions about the availability of Stryker's products in your area. Specifications subject to change without notice.

Stryker or its affiliated entities own, use, or have applied for the following trademarks or service marks: CPR Advisor HeartSine, Pad-Pak, Pediatric-Pak, samaritan, Saver EVO, SCOPE, Stryker. All other trademarks are trademarks of their respective owners or holders.

The absence of a product, feature, or service name, or logo from this list does not constitute a waiver of Stryker's trademark or other intellectual property rights concerning that name or logo.

 **0123** HeartSine samaritan PAD is CE marked (class IIb – 0123) in accordance with EU MDD 93/42 and other applicable directives. It will reclassify to CE class III – 0123 in accordance with the EU MDR on or before the end of the MDR transition period May 2024. Pad-Pak and Pediatric Pak are CE marked (class IIb – 0123) in accordance with applicable directives.

 HeartSine samaritan PAD: UL Classified. See complete marking on product.

Date of Issue: 06/2021

Made in U.K.

H009-014-025-AI EN-UK

HeartSine SAM 500P is not available for sale in the U.S.

Copyright © 2021 Stryker.



HeartSine Technologies Ltd.  
207 Airport Road West  
Belfast, BT3 9ED  
Northern Ireland  
United Kingdom  
Tel +44 28 9093 9400  
Fax +44 28 9093 9401  
[heartsinesupport@stryker.com](mailto:heartsinesupport@stryker.com)  
[heartsine.com](http://heartsine.com)

Stryker European  
Operations B.V.  
Herikerbergweg 110  
1101 CM Amsterdam  
Netherlands  
Tel +31 (0)43 3620008  
Fax +31 (0)43 3632001