

# 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.

Typically, only about five percent of SCA victims survive. However, survival rates can increase up to 74%<sup>1</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>2</sup>

More than a simple AED, the HeartSine samaritan PAD 500P (SAM 500P) Automated External Defibrillator (AED) with integrated 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

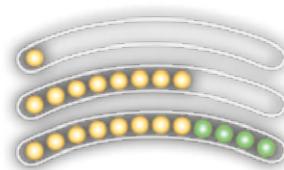
- **Integrated real-time CPR feedback**

Proprietary CPR Advisor provided with the SAM 500P provides real-time visual and verbal feedback to the rescuer on the force and rate of CPR compressions during an SCA resuscitation, without the use of an accelerometer.

Verbal prompts include: Push faster, Push slower, Push harder and Good compressions.

- **Easy-to-follow visual and verbal guides**

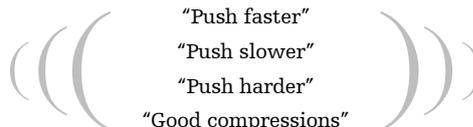
Designed for ease of use, the HeartSine samaritan PAD 500P uses easy-to-understand visual and voice prompts to guide the rescuer through the entire CPR process, providing specific feedback on the force and rate of compressions.



No CPR being performed/Push harder

Push harder

Good compressions



## Ready to shock

- **Highest level of protection against dust and water**

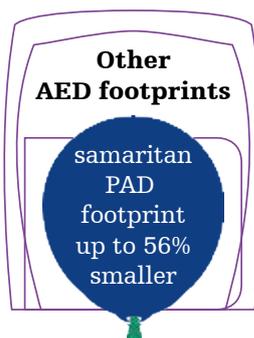
Offers unmatched ruggedness with its high IP56 rating.

- **Clinically validated technology<sup>3</sup>**

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

- **Portable and lightweight**

Most portable AED offered by a leading manufacturer with its light weight (1.1 kg) and compact footprint.



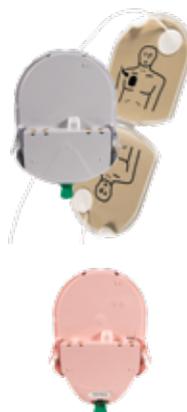
## Simple to own

- **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 offers significant savings over other defibrillators that require separate battery and electrode replacements.



**Pad-Pak and Pediatric-Pak™ with pre-attached electrodes**

The HeartSine samaritan PAD's built-in intelligence and unique Pediatric-Pak ensure the appropriate energy level (50 J) is delivered for children, between 1 and 8 years of age or up to 25 kg (55 lb).

CPR Advisor is deactivated when the Pediatric-Pak is in use.

## Specifications

### Defibrillator

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

### Patient analysis system

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**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

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#### Pad-Pak

Shock 1: 150J

Shock 2: 150J

Shock 3: 200J

#### Pediatric-Pak:

Shock 1: 50J

Shock 2: 50J

Shock 3: 50J

#### Charge time (typical):

150J in < 8 seconds,

200J in < 12 seconds

### Environmental

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#### Operating/Standby temperature:

0°C to 50°C (32°F to 122°F)

#### Transportation temperature:

-10°C to 50°C (14°F to 122°F) for up to two days. If the device has been stored below 0°C (32°F), it should be returned to an ambient temperature of between 0°C to 50°C (32°F to 122°F) for at least 24 hours before use.

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

**Enclosure:** IEC/EN 60529 IP56

**Altitude:** 0 to 4 575 metres (0 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

**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

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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

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#### 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 continuous monitoring

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

### Data storage

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**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

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**Defibrillator housing:** ABS, Santoprene

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

### Warranty

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**AED:** 8-year limited warranty



**References**

1. 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.
2. 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.
3. Walsh SJ, McClelland A, Owens CG, Allen J, McC Anderson J, Turner C, Adgey J. Efficacy of distinct energy delivery protocols comparing two biphasic defibrillators for cardiac arrest. *Am J Cardiol*. 2004;94:378-380.

For further information contact us at [heartsinesupport@stryker.com](mailto:heartsinesupport@stryker.com) or visit our website at [heartsine.com](http://heartsine.com).

**EMEA/APAC**

HeartSine Technologies, Ltd.  
203 Airport Road West  
Belfast, BT3 9ED  
United Kingdom  
Tel: +44 28 9093 9400  
Fax: +44 28 9093 9401 



UL Classified. See complete marking on product.

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

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