

HeartSine® samaritan® PAD 500P

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 of a lifesaving shock by an AED. Either way, every minute counts.¹

Only about ten percent of SCA victims survive.² However, survival rates can increase up to 74%³ 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.¹

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.

During the resuscitation, the rescuer will hear feedback on the force of compressions, "Push harder," and on the rate of compressions, "Push faster" or "Push slower," or will hear acknowledgment of "Good 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

IP56 rating, one of the highest ratings in the industry, enables both indoor and outdoor use.



Clinically validated technology⁴

Advanced electrode technology and SCOPE (Self-Compensating Output Pulse Envelope) biphasic technology, a low energy escalating waveform that automatically adjusts for differences in patient impedance.



Compact and lightweight

At just 1.1 kg and with one of the most compact footprints, the SAM 500P is easily transported and fit into constrained spaces.

Simple to own



Two parts, one expiration date

Each HeartSine AED comes with the innovative Pad-Pak, an integrated battery and electrode single-use cartridge with one expiration date, which offers one simple change every four years.



Low cost of ownership

A 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): 150 J in < 8 seconds 200 J 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/ EN 60529 IPX6 with electrodes connected and battery installed
Dust resistance: IEC 60529/ EN 60529 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 1060 hPa (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 80 MHz-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 (TSO/ETSO-C142a/ EASA.21O.10042190)
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)
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

Pad-Pak electrode and battery cartridge
Shelf life/Standby life: See the expiration date on the Pad-Pak/Pediatric-Pak
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 ₂) 18V)
Battery capacity (new): > 60 shocks at 200 J 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 ² (15 in ²)
Electrode cable length: 1 metre (3.3 feet)
Aircraft safety test (TSO/ETSO-certified Pad-Pak): RTCA/DO-227 (TSO/ETSO-C142a/ EASA.21O.10042190)

References

1. Mosesso Jr VN, et al. Proceedings of the National Center for Early Defibrillation Police AED Issues Forum. *Prehospital Emergency Care*. 2002;6(3):273–82.
2. Kiguchi T, Okubo M, Nishiyama C, et al. Out-of-hospital cardiac arrest across the world: first report from the International Liaison Committee on Resuscitation (ILCOR). *Resuscitation*. 2020;doi: <https://doi.org/10.1016/j.resuscitation.2020.02.044>.
3. Valenzuela TD, et al. Outcomes of Rapid Defibrillation by Security Officers After Cardiac Arrest in Casinos. *New England Journal of Medicine*. 2000;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 09/2025.


For further information, please contact your Stryker representative or visit our website at [stryker.com](https://www.stryker.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.

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 HeartSine samaritan PAD is a class III – 0123 device in accordance with EU MDR. Pad-Pak and Pediatric-Pak are CE class IIB – 0123 also in accordance with EU MDR.

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

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Made in U.K.

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

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