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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%¹ 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.²

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, including CPR.



Easy-to-follow visual and verbal guides

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 appropriate 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 technology³

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

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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 offers 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: 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

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

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 (LiMnO₂) 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^2 (15 in²)

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. 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.

All claims valid as of April 2020.

For further information, please contact your Stryker representative or visit our web site at 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.

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