samaritan® PAD 450P

HeartSine®

Public Access Defibrillator with Integrated CPR Rate Advisor™

The confidence and power to save a life.

While some cardiac events are treatable with effective Cardiopulmonary Resuscitation (CPR) alone, others require a combination of effective CPR and the use of an automated external defibrillator (AED) to deliver a lifesaving shock within the first few minutes of sudden cardiac arrest (SCA). In both cases, effective CPR contributes to an increase of survival rates of up to 75%.

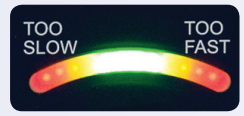
More than a simple AED, HeartSine's samaritan PAD 450P with integrated CPR Rate Advisor™ provides real-time visible and audible feedback to the rescuer on the rate of CPR compressions during an SCA resuscitation.

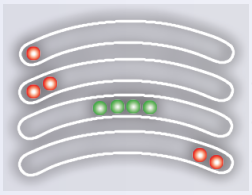
Real-Time CPR Rate Feedback

ICG-Based Feedback. With its revolutionary technology, HeartSine's proprietary CPR Rate Advisor uses only the defibrillator electrodes to determine the rate of CPR being applied, without the addition of accelerometers (or pucks) commonly used in other AED solutions.

Easy-to-Follow Visual and Verbal Guides. Easy-to-understand visual and voice prompts guide a user through the entire CPR process, providing specific feedback on the rate of compressions.

Improved CPR Fraction. To ensure that CPR is consistently delivered, the SAM 450P continues to remind the rescuer to perform CPR when no CPR is detected.





No CPR being performed/"Begin CPR"
"Push Faster"
"Good Speed"
"Push Slower"

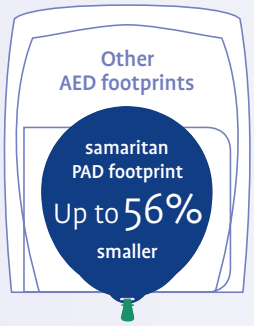
Visual indicators and audible feedback tell the rescuer if the rate of CPR is in line with the AHA guidelines.

Ready to Shock

Highest level of protection from dust and water. With its IP56 rating, the SAM 450P defibrillator offers unmatched ruggedness for a variety of environments.

Advanced technology. The SAM 450P utilizes proprietary electrode technology and SCOPE™* biphasic technology, an escalating and low-energy waveform that automatically adjusts for patient impedance differences, to assess rhythm and recommend defibrillation if necessary.

Most compact design. At 2.4 lbs and with a compact footprint, the SAM 450P is the most portable AED on the market.



* Self-Compensating Output Pulse Envelope technology automatically optimizes the waveform pulse envelope (amplitude, slope, and duration) for each individual patient.

Real Economy for the Real World

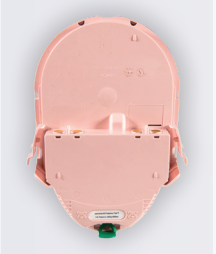
Two parts, one expiration date. Pad-Pak™ cartridge combines battery and electrode pads, with only one expiration date to monitor.

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.

Pad-Pak and Pediatric-Pak
with pre-attached electrodes.

The HeartSine PAD's built-in intelligence and unique pediatric Pad-Pak ensure the appropriate energy level is delivered for children.

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



Technical Overview

SAM 450P

Physical	With Pad-Pak™ Inserted
Size:	8.0 in x 7.25 in x 1.9 in/20 cm x 18.4 cm x 4.8 cm
Weight:	2.4 lbs/1.1 kg including Pad-Pak Battery

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

Patient Analysis System	
Method:	Evaluates patient's ECG, signal quality, electrode contact integrity and patient impedance to determine if defibrillation is required
Sensitivity/Specificity:	Meets ISO 60601-2-4 and AAMI DF80

Environmental	
Operating/Standby Temperature:	+32°F to +122°F/0°C to 50°C
Temporary Transportation Temperature:	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.
Relative Humidity:	5% to 95% (non-condensing)
Water Resistance:	IEC 60529/EN 60529 IP56
Altitude:	0 to 15,000 feet/0 – 4,575 meters
Shock:	MIL STD 810F Method 516.5, Procedure I (40 G's)
Vibration:	MIL STD 810F Method 514.5+ Category 4 Truck Transportation – US Highways Category 7 Aircraft – Jet 737 & General Aviation
EMC:	EN 60601-1-2
Radiated Emissions:	EN55011
Electrostatic Discharge RF Immunity:	EN61000-4-3 80MHZ-2.5GHZ (10 V/m)
Magnetic Field Immunity:	EN61000-4-8 (3 A/m)
Aircraft:	RTCA/DO-160F, Section 21 (Category M)
Falling Height:	3.3 feet/1 meter

Energy Selection			
Adult:	Shock 1: 150J;	Shock 2: 150J;	Shock 3: 200J
Pediatric:	Shock 1: 50J;	Shock 2: 50J;	Shock 3: 50J

Charging Time	
New Battery:	Typically 150J in < 8 seconds, 200J in < 12 seconds
After 6 Discharges:	Typically 150J in < 8 seconds, 200J in < 12 seconds

Event Documentation	
Type:	Internal Memory
Memory Capacity:	90 minutes of ECG (full disclosure) and event/ incident recording
Playback Capabilities:	Custom USB cable directly connected to PC and Saver EVO™ Windows-based data review software

Materials Used	
Housing:	ABS, Santoprene
Electrodes:	Hydrogel, Silver, Aluminium and Polyester

Pad-Pak — Electrode and Battery Cartridge Adult Pad-Pak (Pad-Pak-01) and Pediatric Pad-Pak (Pad-Pak-02) *ETSO certified Pad-Pak also available*	
Shelf Life:	4 years from manufacture date
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
Battery Type:	Lithium Manganese Dioxide (LiMnO2)
Capacity:	> 60 shocks at 200J 18V, 1.5 Amp Hrs
Electrodes:	HeartSine samaritan disposable defibrillation pads are supplied as standard with each device
Placement:	Anterior-lateral (Adult); Anterior-posterior (Pediatric)
Active Gel Area:	15.5 in^2/100 cm^2
Cable Length:	3.3 feet/1 meter

UL Classified. See complete marking on product.

CAUTION: U.S. Federal law restricts this device to sale by or on the order of a licensed practitioner.

H009-041-001-0

Lifesaving, Pure and Simple
HeartSine®