

# HeartSine® samaritan® PAD 350P/360P

## Connected AEDs

**Semi-automatic/fully automatic public access defibrillators with integrated Wi-Fi® connectivity**

## Data sheet

### Readiness matters.

When sudden cardiac arrest occurs, immediate treatment is vital. A victim's chance of survival dramatically decreases for every minute without treatment.<sup>1</sup> This means not only must an automated external defibrillator (AED) be close at hand and easy to use, it must be ready to shock.

Connected for extra protection, HeartSine samaritan PAD 350P and 360P Connected AEDs offer key features that help ensure readiness:

- Simplified readiness monitoring
- Integrated Wi-Fi connectivity
- AED program management
- Low cost of ownership

### Readiness made easy



#### LIFELINKcentral AED program manager

Monitors AED programs by tracking AED readiness status, Pad-Pak expirations, CPR/AED training certificates and more.



#### Integrated connectivity

Communicates via Wi-Fi with LIFELINKcentral AED program manager to enable AEDs to be managed across a single or multiple locations.



## Made for you



### Real-time CPR coaching

Easy-to-understand visual and voice prompts guide the rescuer through the entire resuscitation process, including CPR — a key link in the chain of survival.



### 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).



### One- or two-button operation

With just an On/Off button (and the Shock button on the SAM 350P), offers a simple, straightforward operation.



### Automatic shock delivery / Motion detection

Fully automatic SAM 360P\* detects motion, such as performing CPR or moving the patient, to reduce the likelihood that the user is touching the patient prior to shock delivery.



### Highly portable

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



### Clinically validated technology<sup>2</sup>

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.



### High level of protection from dust and water

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

## 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.

\*WARNING: The SAM 360P is a fully automatic defibrillator. When required, it will deliver a shock to the patient without user intervention.



# 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: 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

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### Operating/Standby temperature:

0°C to 50°C (32°F to 122°F)

Note: The temperature of the electrodes could be up to 50°C (122°F) if your device has been exposed to these conditions

### 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 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 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 (TSO/ETSO-C142a/ EASA.210.10042190)

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

## Physical characteristics

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With Pad-Pak inserted and HeartSine Gateway, with batteries, attached:

### Size:

23.4 cm x 18.4 cm x 4.8 cm  
(9.21 in x 7.25 in x 1.9 in)

**Weight:** 1.285 kg (2.83 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

**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 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<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 (TSO/ETSO-C142a/ EASA.210.10042190)

## HeartSine Gateway Battery

**Type:** CR123A 3V, Non-rechargeable

**Type number:** 6205

**Designation IEC:** CR 17345

**Weight (per battery):** 17g

**Quantity:** Four

**System:** Lithium Manganese Dioxide / Organic Electrolyte

**UL recognition:** MH 13654 (N)

**Nominal voltage (per battery):** 3V

### Typical capacity load:

100 Ohm, at 20°C, 1550 mAh down to 2V

**Volume:** 7 ccm (0.43 in<sup>3</sup>)

## 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 / HeartSine Gateway:** ABS, Santoprene

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

## Warranty

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**AED:** 8-year limited warranty

**HeartSine Gateway:** 2-year limited warranty

## Communications

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- Wireless 802.11 b/g/n data transfer to LIFELINKcentral AED program manager
- USB connection to Saver EVO software through Micro USB port

## References

1. Graham R, McCoy M, Schultz A. Strategies to improve cardiac arrest survival, a time to act. *Institute of Medicine Report*, 2015.
2. 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.

If you purchased your HeartSine Connected AED from an authorised Stryker distributor or reseller, this distributor or reseller will have access to your LIFELINKcentral AED program manager account and may receive notifications prompted by the HeartSine Connected AED. Please note that this setting to notify your distributor or reseller can be disabled at ANY time; if you wish to disable this setting, please send a request to Stryker Customer Support to self-manage your site without notifications to your distributor or reseller.

All claims valid as of 06/2023.


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.

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 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 Gateway is CE marked in line with RED Directive 2014/53/EU.

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

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HeartSine Gateway is not available in all countries.

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HeartSine Technologies, Ltd.  
207 Airport Road West  
Belfast  
Northern Ireland  
BT3 9ED  
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 43 362 0008  
Fax +31 43 363 2001

# samaritan® PAD 450P



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.

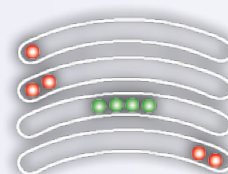
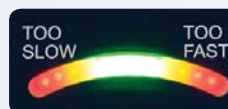


## Real-Time CPR Rate Feedback

**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"

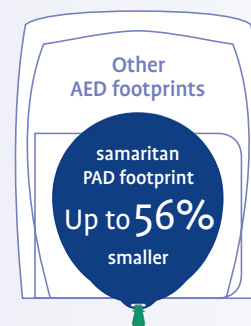
Visual indicators and audible feedback tell the rescuer if the rate of CPR is in line with the AHA guidelines.

## 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.



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) <i>*ETSO certified Pad-Pak also available</i>	
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 <sup>2</sup> /100 cm <sup>2</sup>
Cable Length:	3.3 feet/1 meter

**EMEA/APAC**  
HeartSine Technologies, Ltd.  
203 Airport Road West  
Belfast, Northern Ireland  
BT3 9ED  
Tel: +44 28 9093 9400  
Fax: +44 28 9093 9401  
info@heartsine.com



**U.S./Americas**  
HeartSine Technologies, Inc.  
121 Friends Lane, Suite 400  
Newtown, PA 18940  
Toll Free: (866) 478 7463  
Tel: +1 215 860 8100  
Fax: +1 215 860 8192  
info@heartsine.com



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.

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Lifesaving, Pure and Simple



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