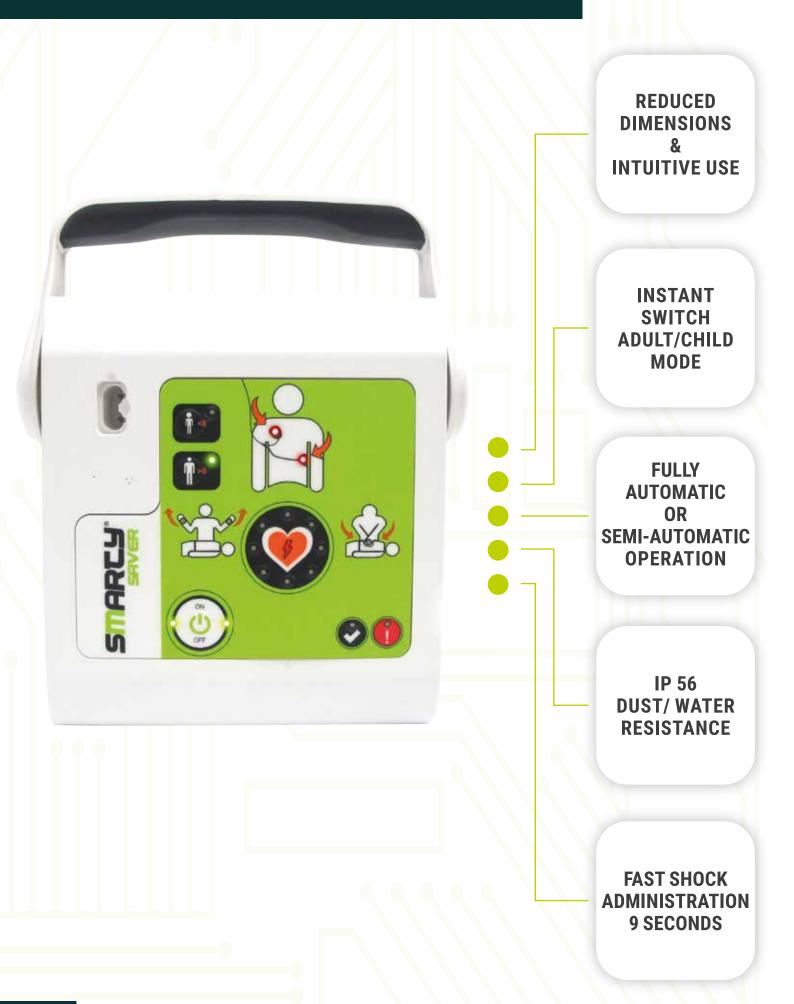


# WALLACE CAMERON INTERNATIONAL



SMART DESIGN
SMART TECHNOLOGY
SMARTY SAVER



## WITHIN EVERYONE'S REACH!

The best portable AED (Automated External Defibrillator) conceived for a quick and simple treatment of the Sudden Cardiac Arrest (SCA) and to assist in delivering the Cardiopulmonary Resuscitation (CPR).

The Smarty Saver Series is AMI Italia latest defibrillators line that meets all the requirements of a modern AED: designed to reliable, simple and easy to use by anyone, whether they are trained or not.

Even in the best of circumstances, an emergency medical response cannot respond as quickly as a bystander with access to an AED. The **lightweight and portability**, thanks to the **folding handle**, the compactness and its **catchy look**, are conceived to meet the "gold standard" for early defibrillation in public large areas.

Last but not least, the **advanced electronic** guarantees the best functionality which you would expect from an average sized AED, although it's confined in a **very small case**.



#### **KEY FEATURES:**

- Reduced dimensions (fitting an A4 sheet!)
- Practical folding handle
- Audio and visual signals for users
- Guidance through voice prompt and metronome
- Universal preconnected electrodes
- BTE waveform defibrillation with shocks ≤200J

#### **ADVANCED FEATURES:**

- Smarty Saver Plus: CPR quality feedback in real time
- Smarty Saver Geo: CPR quality feedback in real time + access to Amisavercloud Platform

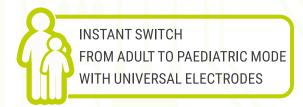


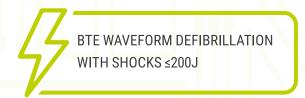
#### **SMARTY SAVER**

# SMART DESIGN & SMART TECHNOLOGY FOR A MODERN AED!









Compliant to latest ERC/AHA guidelines

The basic model of the Smarty Saver Series line, very affordable and easy to use.

Reliable and durable (1meter drop test - dustproof and waterproof resistance IP rate 56) capable of tackling challenges in various severe environments.

It can be easily operated by anyone in the medical field (e.g. ambulance, emergency room, etc.) and non-medical field too (e.g. public or private places).

It allows to deliver one or more defibrillating shocks on adult or paediatric patients affected by ventricular fibrillation or ventricular tachycardia, by means of a thorax impedance-compensated, biphasic truncated exponential discharge (BTE).

The **Semi-Automatic model** analyses the patient's ECG and if a shockable rhythm is detected it automatically starts charging the reservoir capacitor. The AED vocal message will suggest the operator to press the shock button to deliver the defibrillating shock.

The phase following the defibrillation, that is the Cardiopulmonary Resuscitation, will be guided by voice prompts and the metronome marking the various cycles of compressions and insufflations.

The **Fully Automatic model** instead, if a shockable rhythm is detected, will warn the user of the imminent shock delivery and after 5 seconds the defibrillating shock will be released automatically; the CPR phase will follow.

### **TECHNICAL DATA SHEET**

**DEFIBRILLATOR** 

Model:

Maximal energy: Waveform:

Discharge protocol:

Charging time from shock alert\*:

Charging time from analysis time\*:

Analysis time:
Impedance range:

Sensitivity: Specificity: Controls:

Semi-auto<mark>mat</mark>ic model

Fully Automatic model

Light indicators:

Upgradeable:

Size:

Weight: EVENT RECORDING

**PHYSICAL** 

Optional external memory: Stored data:

"AEDFILE.aed"review:

Code SM1-B1001: Semi-Automatic Code SM2-B1002: Fully Automatic

200J (nominal)

Biphasic truncated exponential (BTE) automatically adapts according to patient's impedance

Adult: incremental

first shock 150J - subsequent 200J

Paediatric: fixed 50J

IEC60601-2-4

≤ 9 sec with shock at 150J ≤ 12 sec with shock at 200J

IEC60601-2-4

≤ 13 sec with shock at 150J ≤ 16 sec with shock at 200J

IEC/EN 60601-2-4 from 4 to 15 seconds

20-200 Ohms 97% (IEC/EN 60601-2-4) 99% (IEC/EN 60601-2-4)

4 buttons: ON/OFF, shock delivery, patient selection (adult/child) 3 buttons: ON/OFF, patient selection (adult/child)

- Device status: 2 LEDs red /green

PADs placement: 2 red LEDs
Do not touch the patient: 2 red LEDs
Touch the patient: 1 green LED

Adult patient: 1 green LED
Paediatric patient: 1 green LED
ON/OFF button: 2 green LEDs

- ON/OFF button : 2 green LED - Shock button: 8 red LEDs

Through USB cable External memory card

\*on a 50 Ohm patient and with a fully charged new battery

200x213x71mm (folded handle) 257x213x71mm (open handle)

1,56 Kg (with battery and PADs)

Micro uSD/SDHC card up to 32GB "AED1LOG.txt": text file with detailed report of the activities of

self-test and power-ups
"AEDFILE.aed": ECG trace, rescue
events, voices and background audio

Through data manager software

"Saver View Express"

**DEFIBRILLATION PADS** 

Dimensions

Shelf-life:

Type: Code SMT-C2001: Disposable, universal, pre-gelled, preconnected

Code SMT-C2002: Disposable,

universal, pre-gelled, preconnected, Face-to-Face Total surface 136cm²; active surface 94cm²; 120cm cable

length (external to the packaging) 24-30 months, as indicated on the

packaging

BATTERY

Type: Code SMT-C14031:
Disposable battery 8 cells Li-MnO

Voltage/capacity: 12VDC-3000mAh

Autonomy: Up to 200 complete rescue cycles

(200J shocks + CPR);

Up to 36 hours of continuous

ECG analysis\*

Stand by life: Up to 3 years with a battery insertion test and daily self-test

without any turning on the AED\*

 $\star$  performance referred to new batteries stored at a temperature of 20°C and relative humidity 45% without condensation

#### **ENVIRONMENTAL SPECIFICATION**

Operating temperature: Storing/Shipping temperature: Humidity:

Sealing (IP Protection): Shock/Drop Abuse Endurance: Electrostatic Discharges: Electromagnetic Compatibility: Protection from defibrillation:

Classification:

0°C to 45°C (32°F to 1<mark>13°</mark>F)

-40°C to 70°C (-40°F to 158°F)

10% to 95%

relative humidity non condensing IEC/EN 60529: class IP56

IEC/EN 60601-1 clause 21 IEC/EN 61000-4-2

IEC/EN 60601-1-2:2015

IEC/EN 60601-1;

device internally powered, Type BF

Directive 93/42/CEE Amd 2007/47/CE:

Class IIb, Annex IX Rule 9

#### **SMARTY SAVER PLUS**

#### **REAL TIME CPR FEEDBACK**







Compliant to latest ERC/AHA guidelines

The Smarty Saver Plus assists the operator for the correct execution of the cardiac massage, during the Cardiopulmonary Resuscitation, thanks to the external "CPR Quality" sensor.

The operator can count on a real-time support to carry out the CPR successfully.

The CPR Quality feedback device is designed to optimize the accomplishment of the Cardiopulmonary Resuscitation by providing simple and accurate responses to the rescuer, in real time! When switched on, this device will automatically be linked to the AED Smarty Saver Plus via Bluetooth; when positioned on the patient's chest, it will measure the depth and frequency of the compressions performed during the CPR and it will send this feedback to the Smarty Saver Plus device.

The 8 flashing LEDs bar located on the AED keyboard will report the accuracy of the compression's depth while the acoustic metronome will mark the correct frequency of compression, along with the voice prompts.

The operator will be able to correct the intensity and the speed of compressions to optimize the CPR.

# **CPR QUALITY SENSOR & CPR QUALITY FEEDBACK**

Smarty Saver Plus assists the operator in properly performing the cardiac massage, during the Cardiopulmonary Resuscitation, thanks to the external "CPR Quality" sensor.

This external device is, in fact, able to measure the depth and the frequency of the compressions performed and to send this feedback to the Smarty Saver Plus device via Bluetooth.

Thanks to the CPR Quality module, the operators can check:

- the correctness of the depth of the compressions they are performing, through the LED bar on the defibrillator's keyboard.
- the correct frequency/rhythm of compressions through the audio signals emitted by the AED

#### **CPR QUALITY SENSOR**

- Turn the module on by pushing the side ignition key
- Place it on the patient's chest prior to start CPR
- Perform the compressions by checking their accuracy through the LED bar on the AED keyboard and with the support of the AED voice instructions



### **CPR QUALITY FEEDBACK**

LED SCALE WITH PROGRESSIVE LIGHTING:









#### **TECHNICAL DATA SHEET**

**DEFIBRILLATOR** 

Model:

Maximal energy: Waveform:

Discharge protocol:

Charging time from shock alert\*:

Charging time from analysis time\*:

Analysis time:

Impedance range: Sensitivity: Specificity: Controls: Semi-Automatic model

Fully Automatic model

Light indicators:

Code SM3-B1003: Semi-Automatic Code SM4-B1004: Fully Automatic 200J (nominal)

Biphasic truncated exponential (BTE)

automatically adapts

according to patient's impedance

Adult: incremental

first 150J - subsequent 200J

Paediatric: fixed 50J

IEC60601-2-4

≤ 9 sec with shock at 150J ≤ 12 sec with shock at 200J

IEC60601-2-4

≤ 13 sec with shock at 150J ≤ 16 sec with shock at 200J IEC/EN 60601-2-4 from 4 to 15 seconds

20-200 Ohms

97% (IEC/EN 60601-2-4) 99% (IEC/EN 60601-2-4)

4 buttons: ON/OFF, shock delivery, Patient selection (adult/child) 3 buttons: ON/OFF, patient selection (adult/child)

Device status: 2 LEDs red/green

PADs placement: 2 red LEDs

- Do not touch the patient: 2 red LEDs

- Touch the patient: 1green LED

- Adult patient: 1 green LED

- Paediatric patient: 1green LED

- ON/OFF button: 2 green LEDs - Shock button: 8 red LEDs

- CPR Quality feedback 8 LED bar: 2 red + 2 orange + 2 yellow + 2 green

- Q-CPR module connection:

1 green LED

Through USB cable External memory card

\*on a 50 Ohm patient and with a fully charged new battery

**PHYSICAL** 

Upgradeable:

Size:

Weight:

200x213x71mm (folded handle) 257x213x71mm (open handle) 1,62 Kg (with battery and PADs)

**EVENT RECORDING** 

Optional external memory: Stored data:

Micro uSD/SDHC card up to 32GB "AED1LOG txt": text file with detailed report of self- test activities and power ups "AEDFILE.aed": ECG trace, rescue

audio

"AEDFILE.aed" review:

events, voices and background

Through data manager softwa<mark>re</mark> "Saver View Express"

**DEFIBRILLATION PADS** 

Code SMT-C2001: Disposable, Type:

universal, pre- gelled, preconnected Code SMT-C2002: Disposable,

universal, pre- gelled, preconnected, Face- to- Face Total surface 136cm²; active surface 94cm<sup>2</sup>; 120cm cable

length (external to packaging)

24-30 months, as indicated on the

packaging

**BATTERY** 

Autonomy:

Voltage/capacity:

Shelf-life:

Dimensions:

Code SMT-C14031: Disposable Type:

battery 8 cells Li- MnO<sub>2</sub> 12VDC-3000mAh Up to 200 complete rescue

cycles (200J shocks + CPR); Up to 36 hours of continuous

ECG analysis\*

Stand by life: Up to 3 years with a battery

insertion test and daily self-test without any turning on the AED\*

\*performance referred to new batteries stored at a temperature of 20°C and relative humidity 45% without condensation

**ENVIRONMENTAL SPECIFICATION** 

Operating temperature: 0°C to 45°C (32°F to 113°F)

Storing/Shipping

temperature: - 40°C to 70°C (- 40°F to 158°F)

Humidity: 10% to 95%

relative humidity non condensing

IEC/EN 60529: class IP56

IEC/EN 61000-4-2

IEC/EN 60601-1 clause 21

IEC/EN 60601-1-2:2015

Sealing (IP Protection): Shock/Drop

Abuse Endurance:

Electrostatic Discharges:

Electromagnetic

Compatibility:

Protection from

Battery:

Type

defibrillation:

IEC/EN 60601-1;

device internally powered, Type BF Classification:

Directive 93/42/CEE

Amd 2007/47/CE: Class IIb.

Annex IX Rule 9

**Q-CPR EXTERNAL MODULE** 

Description: Code SMT-C14034

External module to support quality

CPR paired with the AED via

Bluetooth; Class I 95 x 60 x 13mm; 50gr Weight and Dimension:

According to AHA/ERC guidelines Compression guidance:

for both adult and paediatric patients

Ignition key ON/OFF Green flashing LED: Controls and light icons:

Bluetooth signal search

Green fix LED:

Bluetooth connection active

Code: SMT-C14035 Battery Coin LiMnO

3 VDC / 1Ah

up to 2 hours in continued use

 Voltage/capacity Autonomy

Radio Equipment Directive 2014/53/UE- RED compliance:

#### **SMARTY SAVER GEO**

#### **CPR QUALITY AND GEO SYSTEM**









GEO SYSTEM TO LOCALIZE

AND MONITOR THE AED DEVICE



In addition to the Q-CPR module, the Smarty Saver Geo is equipped also with a SIM card and a GPS/GPRS system; the GPRS system allows the Smarty Saver Geo to transmit and receive data through the mobile phone network, while the GPS system enables the tracking of the AED movements. This info is sent by the device to the Amisavercloud Platform, which is conceived to monitor and control multiple AEDs remotely through any web browser and internet connected device. Among the info and data sent to the platform, such as position and current status of the AED, the device can also transmit the ECG in real time.

Hence a professional operator will be able to view and examine the ECG, real time, remotely on the Amisavercloud Platform just while the ECG is being performed on the patient.

Finally, through the dedicated "Vivo" button located on the keyboard the operator will be free to call the local EMS straight away, directly from the AED!

These features make the Smarty Saver Geo very suitable for the use in moving vehicles such as trains, buses and ambulances.

The device is powered with two independent batteries - one to supply the proper AED functions and another one to supply the additional Geo system functions - in order to preserve the primary use of the device as automatic external defibrillator.

#### **GEO SYSTEM: REAL TIME AED MANAGEMENT**

All the functions can be managed remotely, by any device, through the Amisavercloud Platform:

#### **TELEMETRY**

Smarty Saver Geo connects to the portal daily, sending a log that contains detailed information on its status; this will be shown on the map with a coloured icon. In case of anomaly, the Amisavercloud will notify the authorized user by SMS or e- mail (customizable alert).



device ready to use



warning - anomaly that does not compromise the defibrillator functions



🔀 faulty device - assistance required



The platform can show:

- · AED location:
  - the exact position will be identifiable on the map.
- AED movements (self-tracking function): the AED journey will be visible on the map; if the "anti-theft" function is on the user will be notified by SMS/e-mail every time the AED is moved.





#### REMOTE ASSISTANCE - STREAMING ECG

The AED is able to transmit the ECG in real time; this can be consultable in streaming by any web connected device, via the Amisavercloud Portal. In addition, all ECGs sent will be saved in the portal and made available for subsequent consultations.



#### "VIVO" BUTTON FOR LIVE CALLS

The operator can promptly call the local EMS by pressing the dedicated button on the AED keyboard. According to the local regulation, three telephone numbers can be set up to automatically attempt multiple calls, until a feedback is finally received.



#### **TECHNICAL DATA SHEET**

**DEFIBRILLATOR** 

Model:

Maximal energy: Waveform:

Discharge protocol:

Charging time from shock alert\*:

Charging time from analysis time\*:

Analysis time:

Impedance range: Sensitivity: Specificity: Controls:

Semi- Automatic model

Fully Automatic model

Light indicators:

Code SM5-B1005: Semi- utomatic Code SM6-B1006: Fully Automatic

200J (nominal)

Biphasic truncated exponential (BTE) automatically adapts according to

patient's impedance Adult: incremental

first 150J - subsequent 200J

Paediatric: fixed 50J

IEC60601-2-4

≤ 9 sec with shock at 150J ≤ 12 sec with shock at 200J

IEC60601-2-4

≤ 13 sec with shock at 150J ≤ 16 sec with shock at 200J IEC/EN 60601-2-4 from 4 to 15 seconds 20- 200 Ohms 97% (IEC/EN 60601-2-4)

99% (IEC/EN 60601-2-4)

6 buttons: ON/OFF, shock delivery, patient selection (adult/child), live call, ECG streaming 5 buttons: ON/OFF, patient selection (adult/child), live call, ECG streaming

- Device status: 2 LEDs red/green

- PADs placement: 2 red LEDs

Do not touch the patient: 2 red LEDs

Touch the patient: 1 green LED Adult patient: 1 green LED

Paediatric patient: 1 green LED

ON/OFF button: 2 green LEDs

Shock button: 8 red LEDs

- CPR Quality feedback 8 LED bar: 2 red + 2 orange + 2 yellow + 2 green

- Q-CPR module connection:

1 green fixed LED

- ECG streaming: 1 green blinking LED

Through USB cable

External memory card, remotely

\*on a 50 Ohm patient and with a fully charged new battery

**PHYSICAL** 

Upgradeable:

Size:

Weight:

200x213x71mm (folded handle) 257x213x71mm (open handle) 1,70 Kg (with battery and defibrillation PADs)

Micro uSD/SDHC card up to 32GB

**EVENT RECORDING** 

Optional external memory: Stored data:

"AED1LOG.txt": text file with detailed report of self- test activities and power ups "AEDFILE.aed": ECG trace, rescue events, voices and background audio

"Saver View Express"

"AEDFILE.aed" review: Through data manager software

**DEFIBRILLATION PADS** 

Type:

Code SMT-C2001: Disposable, universal, pre- gelled, preconnected Code SMT-C2002: Disposable, universal, pre- gelled, preconnected, Face- to- Face

Dimensions:

Total surface 136cm<sup>2</sup>; active surface 94cm<sup>2</sup>; 120cm cable length (external to packaging) 24-30 months, as indicated

Shelf-life:

on the packaging

**BATTERY** 

Code SMT-C14032: Type:

Disposable battery 8 cells Li-MnO,

Voltage/Capacity: Ah 12VDC-3000mAh Autonomy:

Up to 200 complete rescue cycles (200J shocks + CPR);

Up to 36 hours of continuous

ECG analysis\*

Up to 3 years with a battery Stand by life:

insertion test and daily self-test without any turning on the AED\*

0°C to 45°C (32°F to 113°F)

IEC/EN 60529: class IP56

IEC/EN 60601-1 clause 21

IEC/EN 60601- 1-2:2015

- 40°C to 70°C (- 40°F to 158°F)

relative humidity non condensing

\* performance referred to new batteries stored at a temperature of 20°C and relative humidity 45% without condensation

10% to 95%

**ENVIRONMENTAL SPECIFICATION** 

Operating temperature:

Storing/Shipping

temperature:

Humidity:

Sealing (IP Protection): Shock/Drop

Abuse Endurance: Electrostatic Discharges:

Electromagnetic Compatibility:

Protection from defibrillation:

Classification:

IEC/EN 60601-1;

IEC/EN 61000-4-2

device internally powered, Type BF

Directive 93/42/CEE Amd 2007/47/CE: Class IIb, Annex IX Rule 9

**Q-CPR EXTERNAL MODULE** 

Description: Code SMT-C14034

External module to support quality CPR paired with the AED via Bluetooth;

Class I

95 x 60 x 13mm; 50gr Weight and Dimension:

According to AHA/ERC guidelines Compression guidance:

for both adult and paediatric patients

Controls and light icons: Ignition key ON/OFF

Green flashing LED: Bluetooth signal search

Green fix LED:

Bluetooth connection active

Battery: Code: SMT- C14035 Battery Coin LiMnO, Type Voltage/capacity 3 VDC / 1Ah

 Autonomy up to 2 hours in continued use

Radio Equipment

compliance: Directive 2014/53/UE- RED

**GEOLOC MODULE** 

GSM: 850, 900, 1800, 1900MHz; Frequency:

UMTS: 900, 2100MHz; GPS: 1575, 1600MHZ

Battery: Type Contained in SMT-C14032;

3 cells Li- SOCl,; 10,8 VDC- 3500 mAh Voltage/capacity

Geo-location, remote control of the Performance: device, live call, ECG streaming

Radio Equipment compliance:

RED-Directive 2014/53/UE



# WALLACECAMERON INTERNATIONAL



BY APPOINTMENT TO H.R.H THE PRINCE OF WALES MANUFACTURERS AND SUPPLIERS OF FIRST AID DRESSINGS

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