SMARTY®
SAVER SERIES

SMART DESIGN
SMART TECHNOLOGY
SMARTY SAVER

www.amiitalia.com

REDUCED DIMENSIONS & INTUITIVE USE

INSTANT SWITCH ADULT/CHILD MODE

FULLY AUTOMATIC OR SEMI-AUTOMATIC OPERATION

IP 56 DUST/ WATER RESISTANCE

FAST SHOCK ADMINISTRATION 9 SECONDS

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 SERIES

SMARTY SAVER
SMART DESIGN & SMART TECHNOLOGY FOR A MODERN AED!

Compliant to latest ERC/AHA guidelines

LIGHTWEIGHT AND CATCHY

INSTANT SWITCH FROM ADULT TO PAEDIATRIC MODE WITH UNIVERSAL ELECTRODES

BTE WAVEFORM DEFIBRILLATION WITH SHOCKS ≤200J

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:	Code SM1-B1001: Semi-Automatic Code SM2-B1002: Fully Automatic
Maximal energy:	200J (nominal)
Waveform:	Biphasic truncated exponential (BTE) automatically adapts according to patient's impedance
Discharge protocol:	Adult: incremental first shock 150J - subsequent 200J Paediatric: fixed 50J
Charging time from shock alert*:	IEC60601-2-4 ≤ 9 sec with shock at 150J ≤ 12 sec with shock at 200J
Charging time from analysis time*:	IEC60601-2-4 ≤ 13 sec with shock at 150J ≤ 16 sec with shock at 200J
Analysis time:	IEC/EN 60601-2-4 from 4 to 15 seconds
Impedance range:	20-200 Ohms
Sensitivity:	97% (IEC/EN 60601-2-4)
Specificity:	99% (IEC/EN 60601-2-4)
Controls:	
Semi-automatic model	4 buttons: ON/OFF, shock delivery, patient selection (adult/child)
Fully Automatic model	3 buttons: ON/OFF, patient selection (adult/child)
Light indicators:	- 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
Upgradeable:	Through USB cable External memory card

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

PHYSICAL

Size:	200x213x71mm (folded handle) 257x213x71mm (open handle)
Weight:	1,56 Kg (with battery and PADs)

EVENT RECORDING

Optional external memory:	Micro uSD/SDHC card up to 32GB
Stored data:	"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
"AEDFILE.aed"review:	Through data manager software "Saver View Express"

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 136cm²; active surface 94cm²; 120cm cable length (external to the packaging)
Shelf-life:	24-30 months, as indicated on the packaging

BATTERY

Type:	Code SMT-C14031: Disposable battery 8 cells Li-MnO_2
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*

** 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
Sealing (IP Protection):	IEC/EN 60529: class IP56
Shock/Drop	
Abuse Endurance:	IEC/EN 60601-1 clause 21
Electrostatic Discharges:	IEC/EN 61000-4-2
Electromagnetic Compatibility:	IEC/EN 60601-1-2:2015
Protection from 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

SMARTY® SAVER SERIES

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 DEVICE

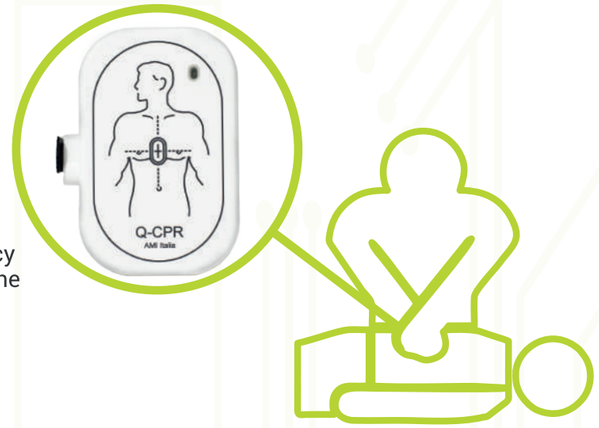
CPR QUALITY FEEDBACK
LED SCALE

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:

INSUFFICIENT OR
EXCESSIVE PRESSURE

NOT ENOUGH
PRESSURE

ALMOST SUFFICIENT
PRESSURE

CORRECT PRESSURE

TECHNICAL DATA SHEET

DEFIBRILLATOR

Model:	Code SM3-B1003: Semi-Automatic Code SM4-B1004: Fully Automatic
Maximal energy:	200J (nominal)
Waveform:	Biphasic truncated exponential (BTE) automatically adapts according to patient's impedance
Discharge protocol:	Adult: incremental first 150J - subsequent 200J Paediatric: fixed 50J
Charging time from shock alert*:	IEC60601-2-4 ≤ 9 sec with shock at 150J ≤ 12 sec with shock at 200J
Charging time from analysis time*:	IEC60601-2-4 ≤ 13 sec with shock at 150J ≤ 16 sec with shock at 200J
Analysis time:	IEC/EN 60601-2-4 from 4 to 15 seconds
Impedance range:	20-200 Ohms
Sensitivity:	97% (IEC/EN 60601-2-4)
Specificity:	99% (IEC/EN 60601-2-4)
Controls:	
Semi-Automatic model	4 buttons: ON/OFF, shock delivery, Patient selection (adult/child)
Fully Automatic model	3 buttons: ON/OFF, patient selection (adult/child)
Light indicators:	- 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: 1green 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
Upgradeable:	Through USB cable External memory card

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

PHYSICAL

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

EVENT RECORDING

Optional external memory:	Micro uSD/SDHC card up to 32GB
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
"AEDFILE.aed" review:	Through data manager software "Saver View Express"

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 136cm²; active surface 94cm²; 120cm cable length (external to packaging)
Shelf- life:	24-30 months, as indicated on the packaging

BATTERY

Type:	Code SMT-C14031: Disposable battery 8 cells Li- MnO_2
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*

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
Sealing (IP Protection):	IEC/EN 60529: class IP56
Shock/Drop Abuse Endurance:	IEC/EN 60601-1 clause 21
Electrostatic Discharges:	IEC/EN 61000-4-2
Electromagnetic Compatibility:	IEC/EN 60601-1-2:2015
Protection from 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
Weight and Dimension:	95 x 60 x 13mm; 50gr
Compression guidance:	According to AHA/ERC guidelines 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
• Type	Battery Coin $LiMnO_2$
• Voltage/capacity	3 VDC / 1Ah
• Autonomy	up to 2 hours in continued use
Radio Equipment compliance:	Directive 2014/53/UE- RED

SMARTY SAVER GEO
CPR QUALITY AND GEO SYSTEM

Compliant to latest ERC/AHA guidelines

CPR QUALITY FEEDBACK

GEO SYSTEM TO LOCALIZE AND MONITOR THE AED DEVICE

"VIVO" BUTTON FOR LIVE EMERGENCY CALL

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

GEOLOCATION

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:	Code SM5-B1005: Semi- utomatic Code SM6-B1006: Fully Automatic
Maximal energy:	200J (nominal)
Waveform:	Biphasic truncated exponential (BTE) automatically adapts according to patient's impedance
Discharge protocol:	Adult: incremental first 150J - subsequent 200J Paediatric: fixed 50J
Charging time from shock alert*:	IEC60601-2-4 ≤ 9 sec with shock at 150J ≤ 12 sec with shock at 200J
Charging time from analysis time*:	IEC60601-2-4 ≤ 13 sec with shock at 150J ≤ 16 sec with shock at 200J
Analysis time:	IEC/EN 60601-2-4 from 4 to 15 seconds
Impedance range:	20- 200 Ohms
Sensitivity:	97% (IEC/EN 60601-2-4)
Specificity:	99% (IEC/EN 60601-2-4)
Controls:	
Semi- Automatic model	6 buttons: ON/OFF, shock delivery, patient selection (adult/child), live call, ECG streaming
Fully Automatic model	5 buttons: ON/OFF, patient selection (adult/child), live call, ECG streaming
Light indicators:	- 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: 1green blinking LED
Upgradeable:	Through USB cable External memory card, remotely

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

PHYSICAL

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

EVENT RECORDING

Optional external memory:	Micro uSD/SDHC card up to 32GB
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
"AEDFILE.aed" review:	Through data manager software "Saver View Express"

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^2; active surface 94cm^2; 120cm cable length (external to packaging)
Shelf- life:	24- 30 months, as indicated on the packaging

BATTERY

Type:	Code SMT-C14032: Disposable battery 8 cells Li-MnO_2
Voltage/Capacity:	Ah 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*

** 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
Sealing (IP Protection):	IEC/EN 60529: class IP56
Shock/Drop Abuse Endurance:	IEC/EN 60601-1 clause 21
Electrostatic Discharges:	IEC/EN 61000-4-2
Electromagnetic Compatibility:	IEC/EN 60601- 1-2:2015
Protection from 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
Weight and Dimension:	95 x 60 x 13mm; 50gr
Compression guidance:	According to AHA/ERC guidelines 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: • Type • Voltage/capacity • Autonomy	Code: SMT- C14035 Battery Coin LiMnO_2 3 VDC / 1Ah up to 2 hours in continued use
Radio Equipment compliance:	Directive 2014/53/UE- RED

GEOLOC MODULE

Frequency:	GSM: 850, 900, 1800, 1900MHz; UMTS: 900, 2100MHz; GPS: 1575, 1600MHZ
Battery: • Type	Contained in SMT-C14032; 3 cells Li- $SOCl_2$;
• Voltage/capacity	10,8 VDC- 3500 mAh
Performance:	Geo-location, remote control of the device, live call, ECG streaming
Radio Equipment compliance:	RED- Directive 2014/53/UE

SMARTY® SAVERSERIES

adv Phantasya.it

SMARTY® SAVERSERIES

WITHIN EVERYONE'S REACH!

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5 YEARS WARRANTY

CE 1282

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REV.E0.22