SMARTY® SAVERSERIES

# TECHNICAL DATA SHEET

## DEFIBRILLATOR

| | |
|---|---|
| **Model:** | Code SM1-B1001: Semi-Automatic<br>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<br>Paediatric: fixed 50J |
| **Charging time from shock alert*:** | IEC/EN 60601-2-4<br>≤ 9 sec with shock at 150J<br>≤ 12 sec with shock at 200J |
| **Charging time from analysis time*:** | IEC/EN 60601-2-4<br>≤ 13 sec with shock at 150J<br>≤ 16 sec with shock at 200J |
| **Analysis time:** | IEC/EN 60601-2-4<br>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<br>- PADs placement: 2 red LEDs<br>- Do not touch the patient: 2 red LEDs<br>- Touch the patient: 1 green LED<br>- Adult patient: 1 green LED<br>- Paediatric patient: 1 green LED<br>- ON/OFF button : 2 green LEDs<br>- Shock button: 8 red LEDs |
| **Upgradeable:** | Through USB cable<br>External memory card |

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

## PHYSICAL

| | |
|---|---|
| **Size:** | 200x213x71mm (folded handle)<br>257x213x71mm (open handle) |
| **Weight:** | 1,56 Kg (with battery and PADs) |

## EVENT RECORDING

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|---|---|
| **Optional external memory:** | |
| **Stored data:** | Micro uSD/SDHC card up to 32GB<br>"AED1LOG.txt": text file with detailed report of the activities of self-test and power-ups<br>"AEDFILE.aed": ECG trace, rescue events, voices and background audio |
| **"AEDFILE.aed"review:** | Through data manager software "SaverViewExpress" |

## DEFIBRILLATION PADS

| | |
|---|---|
| **Type:** | Code SMT-C2001: Disposable, universal, pre-gelled, preconnected |
| **Shelf-life:** | 4 years, as indicated on the packaging |
| **Type:** | Code SMT-C2002: Disposable, universal, pre-gelled, preconnected, Face-to-Face |
| **Shelf-life:** | 24 months, as indicated on the packaging |
| **Dimensions:** | Total surface 136cm²; active surface 94cm²; 120cm cable length (external to the packaging) |

## BATTERY OPTIONS

| | |
|---|---|
| **Type:** | Code SMT-C14031 |
| **Voltage/capacity:** | 12VDC-3000mAh |
| **Autonomy:** | Up to 200 complete rescue cycles (200J shocks + CPR);<br>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* |
| **Type:** | Code SMT-C14033 |
| **Voltage/capacity:** | 12VDC-5600mAh |
| **Autonomy:** | Up to 350 complete rescue cycles (200J shocks + CPR);<br>Up to 100 hours of continuous ECG analysis* |
| **Stand by life:** | Up to 4 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%<br>relative humidity without condensation |
| **Sealing (IP Protection):** | IEC/EN 60529: class IP56 |
| **Shock/Drop Endurance:** | IEC/EN 60601-1 (compliant to 1 m. Drop Test) |
| **Electrostatic Discharges:** | IEC/EN 61000-4-2 |
| **Electromagnetic Compatibility:** | IEC/EN 60601-1-2:2015 |
| **Protection from defibrillation:** | IEC/EN 60601-1;<br>device internally powered, Type BF |
| **Classification:** | MDR (EU) 2017/745 Class III,<br>Annex VIII, Rule 22 |

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# TECHNICAL DATA SHEET

## SMARTY SAVERPLUS
## REAL TIME CPR FEEDBACK



*Compliant to latest ERC/AHA guidelines*

The SMARTY SaverPlus 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 sensor** 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 SaverPlus 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 SaverPlus 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.

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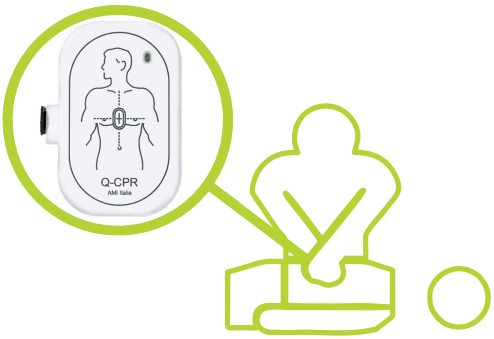
# CPR QUALITY SENSOR & CPR QUALITY FEEDBACK

SMARTY SaverPlus 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 SaverPlus 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