



PRIMEDIC™
Saves Life. Everywhere.



HeartSave

Automatic External Defibrillator

Technology in the battle
against sudden cardiac death

Always at hand in
emergency situations and
accessible for everyone



300 people die of a sudden cardiac arrest every day in Germany. Thus this is the most frequent cause of death - prior to cancer and stroke. The critical ventricular fibrillation causes the sudden cardiac death. It may happen everywhere: at home, at work, when doing sports.

Only the use of a defibrillator and the triggering of a controlled electroschock can stop the ventricular fibrillation effectively. Defibrillation is the only known method to treat these critical rhythms.

Based on this fact, we aimed at developing an intelligent and user-friendly concept that can be operated even by non-medical persons. The PRIMEDIC™ HeartSave is a safe, perfected and well-proven technology. Professional aid can be rendered with a few single movements. The PRIMEDIC™ HeartSave guides the person who renders first aid with short, clearly understandable voice prompts and clear display symbols throughout the emergency assistance.

The sudden cardiac arrest leads to death within a few minutes, if first aid isn't rendered immediately. First attendance of the patient includes cardiopulmonary resuscitation. But this method alone cannot stop the ventricular fibrillation.

Sudden cardiac arrest – every minute counts!

HeartSave – A reliable life-saver

The PRIMEDIC™ HeartSave is a mobile defibrillator, which relieves you of grave decisions:

The device performs an automatic ECG analysis within 12 seconds and decides whether a defibrillation is necessary. Then a touch of a button is sufficient to trigger the life-saving electric pulse that eliminates the ventricular fibrillation. Thus valuable seconds and minutes are used to save life.

Whether in private households, in companies or public authorities. To have the HeartSave within reach is a reassuring feeling.

Handling the HeartSave can be learned in a half-day training. Many relief organizations and Metrax itself offer this training.



Display

The high-resolution LCD monitor gives you every important information for resuscitation and user instructions.

Trigger button

Real single-button operation. You can save life with only one button. Defibrillation is triggered after the OK by pressing the trigger button.

Connecting socket

Connection for SavePads and ECG monitoring cable.



Fig. HeartSave AED-M

Menu buttons

By a short press on these menu buttons you easily get to the setup menu for user-defined settings for navigation in the setup.

Status display

The status display informs you on the operational status of the PRIMEDIC™ HeartSave.

Saves life

Mobile use

Easy to use

Absolutely reliable

Modular design

Many year's of intensive market research have allowed us to develop system solutions for most the different user groups. The PRIMEDIC™ HeartSave AED has been developed exclusively for so-called medical non-professionals. Beyond that, the PRIMEDIC™ HeartSave 6S offers the physician six-channel ECG-leads, SpO2 measurements and much more.

Quick

Cardiological emergencies require practice and, most of all, promptness. With the automatic start when removing the lid, we set further standards with regard to promptness.



Safe

Safety has first priority with the PRIMEDIC™ HeartSave. Safety aspects like clear operation, routine self-tests, special robustness have been distinguishing our products for many years.



Removable memory card for all patient data



The well-proven PRIMEDIC™ one-hand release mechanism (optional)



Easy removal of the storage battery



The PRIMEDIC™ wall fixation (optional)

Technical Data



HeartSave AED

Automatic external defibrillator with integrated one-channel ECG, acoustic and optical user guidance and data backup.



HeartSave AED-M

Automatic external defibrillator incl. monitor for indication of operation duration, ECG, heart rate, identified VF/VT as well as triggered defibrillations.



HeartSave 6

Automatic external defibrillator incl. monitor for indication of operation duration, ECG, heart rate, identified VF/VT as well as triggered defibrillations. 6-channel ECG leads possible.



HeartSave 6S

Automatic external defibrillator incl. monitor for indication of operation duration, ECG, heart rate, identified VF/VT as well as triggered defibrillations. 6-channel ECG leads and SpO₂ measurements possible.

Defibrillation

Wave form	biphasic current controlled pulse	●	●	●	●
Energy	40 - 360 J	●	●	●	●
Charging time	< 12 sec	●	●	●	●
Operating modes	asynchronous	●	●	●	●

ECG

Lead	II	●	●	●	●
	I, II, III, aVr, aVf, aVI	●	●	●	●
Patient's impedance range	20 - 200 Ohm	●	●	●	●
Heart rate	30 - 300 per min	●	●	●	●

VF/VT detection

VF/VT detection		●	●	●	●
Manual override		●	●	●	●
Analysis time	6 - 12 sec	●	●	●	●
VF threshold	0,2 mV	●	●	●	●
Asystole threshold	< 0,2 mV	●	●	●	●
Artefact detection		●	●	●	●
Pacemaker detection		●	●	●	●

Pulse oxymeter

Type	Nellcor				●
Indication area	100 ... 0%				●
Calibration area	100 ... 50 %				●

LCD monitor

Dimensions	95 x 72 mm (diagonal 4,7"/120 mm)		●	●	●
Resolution	320 x 240 (Pixel size 0,36 x 0,36 mm)		●	●	●
Storage battery status display			●	●	●
Speed	25 mm/s		●	●	●
Patient information	Heart rate, number of defibrillations, number of detected VF/VT, total resuscitation time		●	●	●

Electrodes

Non-polarized electrodes		●	●	●	●
Storage	Two years	●	●	●	●
Cable length	1,5 m	●	●	●	●

Data backup

Internal memory	8 MB RAM	●	●	●	●
Removable memory	16 - 128 MB or 1 - 5,4 h with voice recording or 6 - 48 h without voice recording	●	●	●	●
Voice recording		●	●	●	●
Software	Emergency 1.0 (optional)	●	●	●	●

Power supply

Battery					
Type	LiMnO ₂	●	●	●	●
Storage	Five years	●	●	●	●
Discharges	110	●	●	●	●
Monitoring	11 h	●	●	●	●
Voltage	16 V	●	●	●	●

AkuPak

Type	NiCd	●	●	●	●
Discharges	56	●	●	●	●
Monitoring	5 h	●	●	●	●
Voltage	10,6 V	●	●	●	●

PowerLine

Voltage	90 - 264 V	●	●	●	●
Frequency	50/60 Hz	●	●	●	●

Environmental conditions

Operation conditions	0° - 50°C	●	●	●	●
Storing conditions	-30° - +65°C	●	●	●	●

Regulatory

AHA, ERC protocol		●	●	●	●
Protection type	IP 55	●	●	●	●

Dimensions

Height x width x depth	approx. 26 x 26 x 8,5 cm				
Weight without power supply unit	approx.	1,8 kg	2,0 kg	2,0 kg	2,2 kg
Weight with power supply unit	approx.	2,3 kg	2,5 kg	2,5 kg	2,7 kg

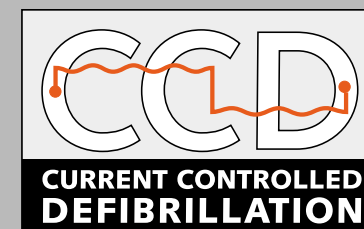
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Storage	Two years	●	●	●	●
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Current Controlled Defibrillation

The new defibrillator pulse, offered by Metrax GmbH is generated by a current-regulated pulse output stage. The current intensity in the patient is kept precisely during the whole pulse duration, independent from the individual patient resistance.

The concept of bi-phase pulse shapes (the pulse direction is changed once while the defibrillation takes place) is included in the new-generation defibrillators. As compared with traditional defibrillator pulses, the current intensity is regulated actively to a predefined set value with our pulse shapes and the pulse duration is given. And only the patient is the variable. By this, the released energy is individually adapted to the patient. An adjustment of an energy level is no longer necessary with the innovative Metrax defibrillator pulse.



Company's headquarter



About us

The Metrax GmbH is specialized in developing state-of-the-art devices for the emergency medicine. Established in 1973 in Rottweil, Metrax is nowadays an outstanding example for the strength of German development technique: Innovative strength, highest quality and all-out effort in research and development have been distinguishing the company for 30 years. Highly precise and reliable high-tech, standard-setting devices are the result.

With PRIMEDIC™ Metrax offers a reliable complete program, which covers the whole patient care chain in the emergency medicine: home emergency call systems, professional defibrillators and mobile ultrasonic therapy units. Life-savers all over the world know PRIMEDIC™ as a guarantor for highest quality and innovative medicine technology.



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