BODYGUARD ON BOARD

PROFESSIONAL DEFIBRILLATORS FOR EMERGENCY MEDICAL USE
CAREER JUMP INTO A SECOND LIFE

PRIMEDIC™ DEFIBRILLATORS – SALTO VITALE CONTRA EXITUS
THURSDAY, 10 JUNE –
FRANKFURT CITY - 17.30 P.M.

Katharina S. is hyped up.
Just one more email.
Then pack my suitcase quickly.
Off to the next strategy workshop.
She loves her job, her husband, her children.
Suddenly, her heart rhythm collapses.
She falls into an abyss of blackness.
Cut.
At the boundary between life and death – where your life hangs by a silken thread our sophisticated PRIMEDIC™ defibrillators provide the decisive impulse – bringing you back to life.
Our high-performance units from the DefiMonitor XD and HeartSave families provide the support to allow professional users to make the quantum leap in emergency and reanimation medicine.
Life is not a coincidence – nor is it a coincidence that our technologically sound units have been used for decades by rescue and health services, practice clinics, aid organisations and doctors: Day in day out, minute by minute and second by second the PRIMEDIC™ units demonstrate practicality, fast availability and unequalled simplicity in handling, even in extreme situations.

Optional instrument configurations

Our XD products can optionally be fitted with additional configurations so you can monitor the patient even more safely:

› Nellcor SpO₂ Pulse oximeter
› Transthoracic external heart pacemaker
› Automatic VF recognition

The DefiMonitor XD family – Technology with its finger on the pulse
EXPERTISE EXTENDS TO THE PADDLES

Quick and easy: The integrated paediatric defibrillation electrodes are always available at the intervention location and do not require an adapter. With an innovative bayonet mechanism, you can easily convert an adult electrode into a paediatric electrode in seconds. This means that the paediatric paddles are always there when you need them – with the DefiMonitor XD.

Full performance - steady grip: Whether ergonomically-shaped external defibrillator paddles or the adhesive electrodes “SavePads”, free hand defibrillation is guaranteed at all times.
INTELLIGENT SOFTWARE AND BIPHASIC DEFIBRILLATION TECHNOLOGY FROM PRIMEDIC™

Detailed software functions and well thought-out hardware equipment characterise the competence spectrum of all PRIMEDIC™ units:

The removable storage cards in the DefiMonitor XD family can, optionally, be used to transfer all the recorded ECG data to any commercially-available PC or to archive the data simply and fuss free. The freely selectable voice recording system is standard on all XD products and can optionally be used for evaluation purposes.

The high-contrast Blue-Mode-TFT LC Display provides optimum monitor viewing, even under bright environmental light conditions. The monitoring cable can be used to permit a free choice as to which of the six options of ECG leads you wish to show on the display. An integrated thermographic printer provides rapid printouts in the auto, online or memo modes.

The DefiMonitor XD with Current Controlled Defibrillation (CCD):
Biphasic defibrillation technology used in the PRIMEDIC™ DefiMonitor XD spares the patient's heart muscles. The impulse output generates a current-regulated defibrillation impulse, which eliminates damaging peak loads: specific to each patient, gently and effectively.

ROUGH CONDITIONS IN SITU – NO PROBLEM

The toughest of conditions in situ require reliable and extremely sound units. For this reason, the DefiMonitor XD has been equipped with shock-absorbing foam inlets and an unbreakable plastic housing. The internal technology is thus reliably protected from knocks and exposure to the weather and remains fully functional and ready to use under all circumstances.
HeartSave 6

**Features:**
Spoken instructions in three languages
Compact Flash Card, ECG viewer
PRIMEDIC™ AkuPak (NiCd) or 6-year lithium battery
Comprehensive alarm functions

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1. **Monitor/Operator Guideline**
   
   Simple and intuitive operation of the semi-automatic defibrillator thanks to high-resolution 4.7” Blue-Mode monitor, display of spoken instructions and exact frequency stipulation during the entire application process

2. **Trigger button**
   
   Genuine one-button operation. Save lives at the touch of just one button. After clearance has been given, pressing the trigger button triggers defibrillation

3. **Connection jack**
   
   Connection for SavePads or ECG monitoring cable

4. **Setup menu**
   
   Configuration in setup menu, option to select verbal instruction, switch over to manual operation

5. **Status display**
   
   The status display will inform you about the operating status (regular self-tests)

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**THE PROFESSIONAL FOR THE PROFESSIONALS**

From the 6 channel ECG to SpO₂ monitoring, the HeartSave 6 series provides everything you need for emergency monitoring.

**Manual operation / synchronous defibrillation**

Once activated, the HeartSave 6/6S is in Automatic Mode. If required, the user can switch the instrument over to manual operation by pressing a button. If, when in manual operation, a QRS complex is detected, synchronous markers are automatically assigned to the R wave and the cardioversion is enabled. The energy stages can be selected from the following in the manual mode: 50 J, 100 J, 200 J, 300 J and 360 J.

**Monitoring**

The 3-pin ECG patient cable included in the scope of delivery allows cost-effective patient monitoring. By simply switching plugs, the highest possible degree of flexibility is attained.
HeartSave 6S

SpO₂ measurement
In addition to the functions of the HeartSave 6, the HeartSave 6S is enabled for SpO₂ measurement.
PRIMEDIC™ AkuPak
Rechargeable battery with charging contacts for charger and socket for PRIMEDIC™ PowerPak

PRIMEDIC™ PowerPak
Charger unit for AkuPak

PRIMEDIC™ Charger Base
Vehicle charging bracket (12V) for HeartSave and XD

PRIMEDIC™ accessories case XD
with storage pockets and carrying strap
PRIMEDIC™ SavePads Connect cable, 2 pole for connecting PRIMEDIC™ SavePads Defibrillation electrodes for adults including cables and plugs

PRIMEDIC™ EKG patient cable 3 pole for connecting ECG electrodes for 6 channel ECG, including cables and plugs. Only for monitoring

Additional accessories available on request.
Technology at the Beating Pulse of Life

Since 1973, we have combined our outstanding expertise with intelligent medical technologies and the latest clinical studies to support the development, production and sales of our tried and tested professional and automatic defibrillators of the PRIMEDIC™ brand. A spirit of pragmatic innovation and many years of experience is the lifeblood pumped into our daily research and development work. Premium quality products – made in Germany: For emergency rescue personnel across the globe, PRIMEDIC™ defibrillators and mobile ultrasound devices stand for the highest safety standards, swift readiness for use and exceptionally ease-of-use - all at an excellent price/performance ratio. Throughout their entire life-cycles, our products are distinguished by an uncompromising approach to quality and unrestricted functional capability, even under the toughest operating conditions.

Defibrillation

Impulse shape: two-phase, current-controlled impulses, external

Energy in the automatic mode: 140 – 360 J increasing energy in accordance with patient impedance

Manual energy stages: 50 J, 100 J, 200 J, 300 J, 360 J

Charge time: < 6 sec. for 200 J

Cardioversion: Auto-synchronous mode

ECG

Derivation: Eindhoven I, II, III, Goldberger avL, avF

Patient resistance: 23-200 Ohm

Heart rate: 30-300 per min

Alarms: 30-300 per min

VF recognition

Analysis time: 7-12 s

VF threshold: 200 μV

Asystole threshold: < 200 μV

Artefact detection

Pacemaker detection

Monitor

Model: TFT, LCD-Blue-Mode

Dimensions: 95 x 72 mm (diagonal 4.7”/120 mm)

115 x 86 mm (diagonal 5.7”/144 mm)

Resolution: 320 x 240 pixels

Pacer

Transcutaneous heart pacemaker (NIP)

Modes: Fix, Demand, Overdrive

Stimulation frequency: 30 – 180 paces per minute (Fix, Demand)

30 – 250 paces per minute (Overdrive)

Impulse shape: 10 mA … 180 mA (Fix, Demand, Overdrive)

Impulse current: Rectangle, 20 ms

Refractory time (Demand): 340 ms (Heart frequency ≤ 100 bpm)

240 ms (Heart frequency > 100 bpm)

QRS Marker: In the demand mode

Pulse oximeter

Model: Nellcor OxiMax

Defibrillation electrodes

Adhesive electrodes (hands free)

Sheel life: 36 months

Cable length: 1.5 m SavePads AED

3.5 m SavePads Connect

Active electrode surface: 164 cm² overall

Paddles: With built-in paediatric electrodes

Printer

Model: Thermal direct process

Resolution: 200dpi

Paper width: 58 mm

Print width: 50 mm

Advance: 25 mm/s / 50 mm/s

Operating modes: AUTO, ONLINE, MEMO print

Event marking: Printout via MEMO print

Data management

Removable memory: CF card (2GB)

Data/voice recording: > 90 h data and voice recording

> 75 h data and voice recording

Voice recording can be activated/deactivated

Read out software
<table>
<thead>
<tr>
<th><strong>Power supply</strong></th>
<th><strong>Battery 6</strong></th>
<th><strong>AkuPak</strong></th>
<th><strong>PowerLine</strong></th>
<th><strong>Built-in power supply</strong></th>
<th><strong>Environmental conditions</strong></th>
<th><strong>Resuscitation guidelines</strong></th>
<th><strong>Approval</strong></th>
<th><strong>Dimensions</strong></th>
<th><strong>Weight with power supply</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>LiMnO2</td>
<td>NiCd</td>
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<td><strong>Voltage</strong></td>
<td>15 V</td>
<td>12 V</td>
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<td><strong>Capacity (nominal)</strong></td>
<td>2.8 Ah</td>
<td>1.4 Ah</td>
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<td><strong>Service life</strong></td>
<td>6 years</td>
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<td><strong>Discharges/shocks</strong></td>
<td>200 @360J</td>
<td>70 @200J</td>
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<tr>
<td><strong>Monitoring</strong></td>
<td>15 h</td>
<td>6h</td>
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<td><strong>Charge time</strong></td>
<td>approx. 2.5 h</td>
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<td><strong>Voltage</strong></td>
<td>90 V ... 264V / 50Hz/60Hz</td>
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<td><strong>Battery charging</strong></td>
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<td><strong>Operating conditions</strong></td>
<td>0°C ... 50°C (30...95% rel. humidity without condensation, 700 ... 1060 hPa)</td>
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<td><strong>Storage conditions</strong></td>
<td>-20°C ... +70°C (30...95% rel. humidity without condensation, 500 ... 1060 hPa)</td>
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<td><strong>Resuscitation guidelines</strong></td>
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<td>IEC60601-1-2:2001 (Electromagnetic compatibility)</td>
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<td>IEC60601-2-2:2002 (Defibrillators)</td>
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<td>EN1789:2003 (Ambulance standard)</td>
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<td>CEN EN ISO9919:2005 (Pulse oximeter standard)</td>
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<td><strong>Protection class</strong></td>
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<td><strong>Dimensions</strong></td>
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<td><strong>Weight with power supply</strong></td>
<td>approx. 2.3 kg</td>
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