



cardiolife AED
AED-3100

Fast, safe and simple to use defibrillator

The availability of an easy-to-use and rapid-application defibrillator can make a great difference in providing effective emergency cardiovascular care. Nihon Kohden's Cardioline AED-3100 automated external defibrillator (AED) enables anyone to save a life. Its intuitive design and voice instruction simplifies and accelerates the delivery of defibrillation.

Cardiolife AED-3100 also allows the shock energy to be turned down for child patients while using the same pads. Daily self-tests and a straightforward status indicator support thoroughness and rapid action, while analysis of VF during CPR and charging enables faster defibrillation delivery.



cardiolife AED

Rapid response

- On opening the lid, the AED powers on automatically and voice instructions begin. Color-guided pad placement simplifies the process of attaching the pads to the patient. Following the analysis of ECG by AEDs, a push of the button delivers a shock, with absolutely no risk of delivering an unnecessary shock.
- Nihon Kohden continuous VF analysis algorithm analyses the ECG waveform, even during CPR. Charging starts before a shock is advised. This helps to deliver faster defibrillation than ever before.
- It takes less than 15 seconds from turning the power on to discharge. Faster charging time helps deliver energy quickly when VF is observed.
- Rapid defibrillation within eight seconds of ECG analysis and charging process.

Biphasic defibrillation

The Cardioline AED-3100 provides defibrillation with the aid of a lower energy, biphasic impulse curve. It needs less energy than traditional monophasic defibrillation and therefore protects the heart muscle.

- It uses a particular T-circuit – **ActiBiphasic technology** – which offers an improvement over most conventional biphasic circuit concepts.
- The Nihon Kohden T-circuit actively controls the shape of the curve in the second phase of the shock impulse, thereby providing a constant impulse curve.

Suitable for all ages

- The Cardioline AED-3100 can be used for both adult and pediatric patients, without changing the pads.
- The energy switch allows defibrillation for pediatric patients by simply switching to the child mode to deliver less energy.

Enhanced memory

- The Cardioline AED-3100 collects and saves the data on resuscitation (ECG and event information) for 30 minutes. This means up to three applications can be documented and analyzed over a period of up to 90 minutes.
- The device's daily self-tests (31 entries), monthly self-tests (12 entries) and other tests (50 entries) can be saved and read for maintenance activities.

Simple status indicator

- At midday each day the Cardioline AED-3100 tests itself in order to monitor its functionality, battery, and electrodes.
- The test results can then be displayed in the form of a red/green status indicator (green = fully operational), which is clearly visible without having to open the device.

Durable and compact design

- The Cardioline AED-3100 has a wide range of operating temperatures, from -5 to +50 °C.
- It has a compact body which weighs only 2.3 kg, including the battery and pads.
- It's easy to carry to an emergency site.
- With an International Protection rating of IP55, the AED-3100 is protected against water jets.

Bluetooth compatible

The saved data and test results can be transmitted wirelessly to a PC via Bluetooth, where they can be conveniently displayed and analyzed using the AED transcription software.

Specifications

AED-3100

Defibrillator

Waveform	Truncated exponential constant power biphasic (ActiBiphasic)
Output energy range	50, 70, 100, 150, 200J (at 50 ohm)
Output energy sequence	150J-200J-200J for adult mode, 50J-70J-70J for child mode
Charging time to 200J from starting analysis	Less than 8 seconds (when using new battery)
Charging time to 200J from end of CPR	Less than 8 seconds (when using new battery)
Automatic internal discharge	The charged energy is internally discharged when any of the following occurs: <ul style="list-style-type: none">- 30 seconds passes after the SHOCK BUTTON starts blinking- A pad is disconnected from the AED or patient- The power is turned off- Non-shockable waveform appears- Battery is removed
Impedance range	15 to 175 ohm (for biphasic waveform)

Battery pack (SB-310V)

Output voltage	15.0V Non-rechargeable
Operation life (standby)	4 years
Shelf life (storage out of devices)	6 years from manufacturing date
Capacity (with new battery at 20°C ambient temperature)	<i>Time for monitoring:</i> more than 6 hours (minimum), or 7.5 hours (typical) <i>Number of times for charging:</i> more than 160 times (minimum), or 200 times (typical)

Self-test

Daily test, monthly test, when the power is turned on, when the power is off, when the battery is set, and if abnormality is detected in self-test, status indicator turns red with alarm.

Arrhythmia analysis

Yes

Data storage

Total storage	90 minutes
Up to 3 cases of rescue data (max. 30 minutes/data)	

Indicators

Status indicator	Green (OK) or Red (needs to be checked)
Shock button	Flashes when shock is available
Pads placement indicator	Blinks when pads are not attached to patient
Pads check indicator	Lights in following cases: when pads are not connected AED, when the term of pads expires, when pads are not for AED-3100
Battery remaining indicator	Yes
Child mode lamp	Lights up when the adult/child mode switch is set to child mode
Service indicator	Lights up when AED is faulty

Dimensions and weight Display

Dimensions	206 (W) x 97 (H) x 252 (D) mm
Weight	2.3 kg including battery and pads, 1.9 kg without battery and pads

Environment

Operating and installation conditions

(with battery installed and power off):

Temperature	-5 to +50 °C
Humidity	5 to 95 % (relative humidity, non-condensing)
Atmospheric pressure	540 to 1060 hPa
Shipment, transport, and storage conditions	<i>Temperature:</i> -20 to +70 °C <i>Humidity:</i> 5 to 95 % (relative humidity) <i>Atmospheric pressure:</i> 540 to 1060 hPa



Improving Healthcare with Advanced Technology



NIHON KOHDEN EUROPE GmbH
Raiffeisenstr. 10, 61191 Rosbach, Germany
Phone: +49 (0) 6003 827-0, Fax: +49 (0) 6003 827-599
Internet: www.nihonkohden.com, E-mail: info@nke.de



NIHON KOHDEN CORPORATION
1-31-4 Nishiochiai, Shinjuku-ku, Tokyo 161-8560, Japan
Phone: +81 (3) 59 96-80 36, Fax: +81 (3) 59 96-81 00
Internet: www.nihonkohden.com