



cardiolife AED  
AED-3100

# Fast, safe and simple to use defibrillator

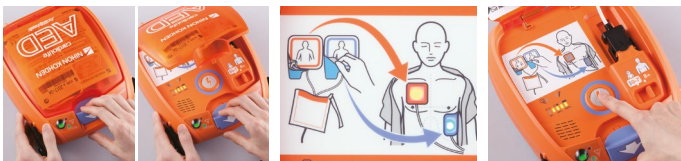
The availability of an easy-to-use and rapid-application defibrillator can make a great difference in providing effective emergency cardiovascular care. Nihon Kohden's Cardioline AED-3100 automated external defibrillator (AED) enables anyone to save a life. Its intuitive design and voice instruction 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. Analysis of the heart rhythm and charging during CPR enables faster defibrillation delivery. AEDs need to be managed and checked on a regular basis; with the implementation of an effective maintenance program, this can be done remotely in order to save time and effort.



# cardiolife AED

## Easy 3-step operation



Step 1

Step 2

Step 3

### Step 1 – Open the lid

Open the lid to turn on the power. Clear voice instructions will start immediately and guide you through the entire procedure

### Step 2 – Attach the pads to the patient

After attaching the pads, the AED-3100 immediately starts to analyze the heart rhythm

### Step 3 – Press the shock button

If a shock is needed the shock button is flashing. Push the button to deliver the electrical shock to the patient

## 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.

## Automatic self-tests

Every day the Cardioline AED-3100 performs a self-test. This daily test consists of checking the current AED status, pad expiration date, battery expiration date and remaining battery power. Once per month an even more thorough test is performed, where a full charge and discharge is added to the daily tests. When AED linkage is used for remote monitoring, an alert is automatically sent, if any abnormality is detected.

## Rescue data saved

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 saved data and test results can be transmitted wireless to a PC via Bluetooth, where they can be conveniently displayed and analyzed.

## Durable and compact design

The Cardioline AED-3100 operates in a wide range of temperatures, from -5 to +50 °C. It has a compact body which weighs only 2.3 kg, including the battery and pads. With an International Protection Rating of IP66, the AED-3100 is protected against water jets.

## Continuous heart rhythm analysis

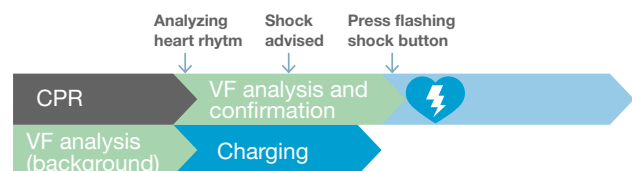
Nihon Kohden's continuous VT/VF analysis algorithm analyses the ECG waveform, even during CPR. Charging starts before a shock is advised. This helps to deliver faster defibrillation than ever before.

It takes less than 15 seconds from turning the power on to discharge. Faster charging time helps deliver energy quickly when VT or VF is observed.

### Conventional AED mode



### Nihon Kohden's solution for continuous VF/VT analysis and standby charging



The Cardioline AED-3100 provides defibrillation with the aid of a lower energy, biphasic impulse curve. It uses a particular T-circuit – ActiBiphasic technology – which offers an improvement over most conventional biphasic circuit concepts.

# Specifications

## AED-3100

### Defibrillator

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

### Battery pack (SB-310V)

<b>Output voltage</b>	15.0V Non-rechargeable
<b>Operation life (standby)</b>	4 years
<b>Shelf life (storage out of devices)</b>	6 years from manufacturing date
<b>Capacity (with new battery at 20°C ambient temperature)</b>	<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

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

### Indicators

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

### Dimensions and weight

<b>Dimensions</b>	206 (W) x 97 (H) x 252 (D) mm
<b>Weight</b>	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):

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



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