

cardiolifeEMS

Defibrillator EMS-1052



Fighting Disease with Electronics

 NIHON KOHDEN



TRANSITIONING BACK TO LIFE



When an every-moment-counts situation occurs in emergency treatment, you need to do everything possible in your power to save the patient's life. This light and compact device enables you to deliver a fast response to the patient on site. Nihon Kohden's original innovative technology contributes to a better outcome for the patient and the integrated system for data transmission empowers your team to improve quality of resuscitation.

This is cardiolineEMS.

Restoring Life

Ensuring Quality of Resuscitation

Ensure high quality CPR and advanced airway management

Nihon Kohden's cap-ONE is the world's smallest and lightest mainstream CO₂ sensor. It is suitable for emergency sites because of the simple heater-less design.

This CO₂ sensor has a fast response which is helpful to confirm tracheal tube position, ensure quality of CPR and be an early indicator for Return of spontaneous circulation (ROSC) during CPR as recommended by international guidelines.

cap-ONE
ORAL NASAL EXPIRATION

Ensure
quality of
CPR



Early indicator
for ROSC
during CPR

Confirm
tracheal tube
position

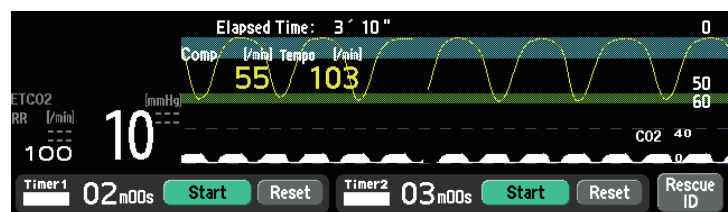


Audible Cue provides the caregiver with instant feedback about ETCO₂ level changes by delivering 5 different, easily recognizable sounds to indicate 5 ranges from high to low ETCO₂.

Proper depth of chest compressions during CPR creates adequate blood flow and oxygen delivery to the heart and brain. Moreover, proper rate of chest compressions during CPR is an important determinant of ROSC and survival with good neurologic function.



CPR assist



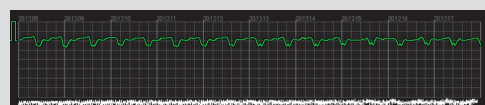
Communicating with optional CPR-1100 CPR assist by Bluetooth® connection

Minimize pause during CPR

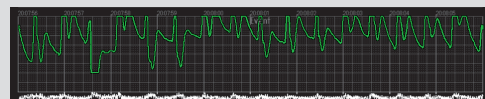
Nihon Kohden's artifact suppression pads, P-700 series, are less affected by baseline drift during CPR compared to conventional pads.

They minimize the CPR pause period, as ECG waveforms can be seen even under chest compressions.

P-700 series,
Artifact suppression pads



Conventional pads



Saving Life

Effective Shocks on Demand

Faster shock delivery produces better outcomes

It takes less than 4 seconds to charge 200J with a fully charged new battery. Faster charging time helps you deliver energy quickly when VF is observed.

ECG baseline recovers within 3 seconds after defibrillation. The defibrillation result and patient condition can be monitored immediately.



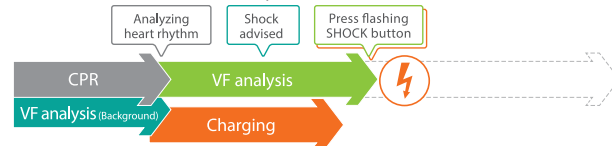
Even in AED mode...

Continuous VF/VT analysis is available on cardiolineEMS. With this function, the ECG waveform can be analyzed during CPR and energy charging starts before the shock is advised. This helps you deliver faster defibrillation in AED mode than ever before.

Conventional AED mode



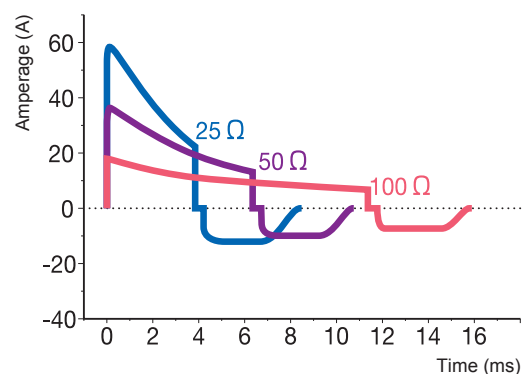
Continuous VF/VT analysis



For more effective defibrillation...

It is important for effective defibrillation to deliver all the necessary energy to the patient within 20 ms. Nihon Kohden's unique ActiBiphasic technology keeps the 2nd phase duration within 4 ms. This reduces total energy delivery duration to close to 20 ms even in high impedance patients.

ActiBiphasic



Sustaining Life

Post Cardiac Arrest Management

Decision support of cardiac arrest care

For MI patients, transmitting 12-lead ECG data before arrival at the hospital is a general requirement to shorten door-to-balloon time. Not only waveforms but also interpretation helps you to make decisions about the for next steps of treatment of cardiac arrest. Besides, cardioliFEEMS provides you with advanced ECG diagnosis for STEMI patients with additional 6-lead information for posterior and right ventricular leads by using synthesized 18-lead ECG, synECi18. In addition to 12-lead ECG, various options for data transmission of vital signs give you more flexible choices for using ePCR systems to reduce the burden of your work. Real time data transmission supports sharing the current patient condition with your team to enable the patient to be treated by various specialists during transportation.

Data transmission



12-lead ECG and rescue data
Rescue linkage



Vital sign data(Real time)
Vitrac



Data acquisition
(after transportation)

For details of network configuration, contact your NIHON KOHDEN representative.

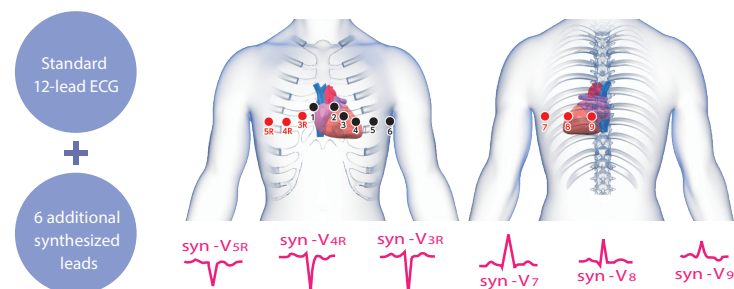
12-lead ECG measurement with synthesized 18-lead

With synthesized 18-lead ECG (synECi18)*, by just measuring 12-lead ECG, you can get additional information for both right ventricular and posterior leads. It helps you identify invisible ischemia.

*option

synECi18
Synthesized Electrocardiogram

For Identify Ischemia
Synthesized 18-lead ECG from standard 12-lead ECG



Nihon Kohden monitoring technologies



NIBP measurement with
speed, gentleness and
reliability



High quality monitoring
increases accuracy



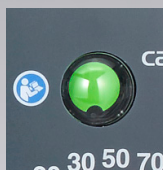
Redefining quality of
care with non-invasive
hemodynamics monitoring

Every Moment Counts

Always be ready

The status indicator informs you of daily and monthly self-test results. This helps keep your defibrillator always working and ready for its critical role in resuscitation.

The most critical component, the high voltage capacitor, has a unique high reliability design. The high voltage capacitor is divided into thousands of individual cells to prevent sudden, total failure of the capacitor. Even if one part fails, the remaining cells can still provide shock.



Intuitive operation

Touch panel and control dial to select the energy and mode give you intuitive operation in emergency use of device.

You can choose a maximum of 3 keys to use as shortcut keys based on your work flow. Touch key off function is helpful for preventing unnecessary screen transitions when you touch the display during transportation.



Always visible

The emergency environment is not always favorable to defibrillators. Outside the ambulance, the daylight can interfere with LCD screen visibility. With a high power backlit LCD, cardiolineEMS provide clear visibility even under strong sunlight.



Tough in various environment

Operating temperature: -20 to 50C°



High dust and water protection based on IP55



Vibration:

EN1789

Electromagnetic compatibility:

RTCA/ DO-160G (category M)

Specifications

Dimensions	217mm×255mm×140mm (W×H×D)
Weight	4.2kg (including battery)
Display size	6.5-inch color LCD
Energy	2 to 270J
Parameter	ECG, SpO ₂ , CO ₂ , NIBP, IBP, Temperature
Operation mode	Manual, AED, pacing(option), monitoring
Battery operating time	200 discharges at maximum energy / 360 minutes monitoring / 210 minutes pacing
Energy charging time	Less than 4 seconds to 200J
Power supply	Battery, AC power
Data/Communication	Bluetooth, Wireless LAN

Major options

Lithium ion battery, SB-121V	Disposable pads, P-711 H329 Pad adapter, JC-165V	CPR assist, CPR-1100	Wall mount, KG-101V
			Battery charger, SB-101V
			AC adapter, SC-101V
			Carrying bag, YC-101V/YC-102V
			Shoulder belt, YC-103V
			Recording paper, 110mm, RQS110-2
			Defibrillator report viewer, QP-551VK
			External paddle, ND-831V
			External paddle holder, DP-101V

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