

## Improving quality of resuscitation





# **Transitioning back to life**





## **Pre-hospital**

Out-of-hospital 12-lead ECG acquisition and data transmission

In the resuscitation guidelines, the performance of out-ofhospital 12-lead ECGs with transmission or interpretation is regarded as an important key component of STEMI (ST-segment myocardial infarction) care system.

TEC-8300K series provides the solutions that enable simple and easy 12-lead ECG acquisition and data transmission to remote facilities. These solutions contribute to faster activation of cath lab and faster access to primary PCI, which helps door-to-balloon time reduction.

## ICU

Intensive care for post-cardiac arrest

As one of the key post-cardiac arrest care, intensive patient monitoring is necessary.

TEC-8300K series with MULTI connector provides simultaneous ECG, SpO<sub>2</sub>, CO<sub>2</sub>, IBP, NIBP, Temperature measurements. These features and functions immediately alert you if patient status is changed and help you faster and more accurate decision making.

Newly-added NIHON KOHDEN's original "ec1" arrythmia analysis algorithm on TEC-8300K also help accurate patient monitoring. In addition to that, TEC-8300K provides intuitive and user-friendly AED function and external pacing for sudden patient status change. Shock Efficiency on Demand

### For more effective defibrillation

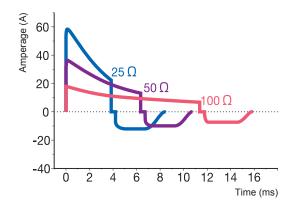
**20 ms:** It is important for effective defibrillation to deliver all the necessary energy to patient within 20 ms.

Nihon Kohden's unique ActiBiphasic technology keeps the 2nd phase duration within 4 ms. This reduces total energy delivery duration close to 20 ms even in high impedance patients.

In conventional biphasic circuits, when impedance is high, the pulse width becomes wider which reduces the efficiency of defibrillation.

Nihon Kohden's T-circuit actively controls the shape of the second phase waveform to maintain constant pulse width.





#### Fast shocks and continuous observation

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

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

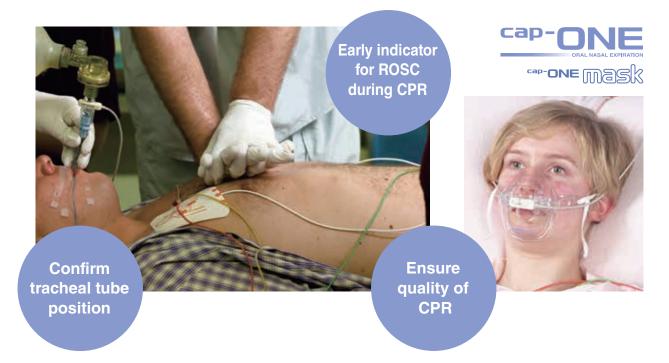
**Intuitive operation:** The control dial provides intuitive operation for energy selection and mode selection such as AED, MONITOR, SETUP, BASIC CHECK and PACING modes.



Restoring Life Assure Effectiveness of Resuscitation

# Ensure advanced airway management and high quality CPR

cap-ONE is a small and lightweight mainstream  $CO_2$  sensor with Nihon Kohden's unique technology. It is suitable for emergency sites because of the simple heater-less design. This  $CO_2$  sensor has a fast response which is helpful to confirm tracheal tube position, ensure quality of CPR and be an early indicator for ROSC during CPR as recommended by international guidelines.



## **Minimize pause during CPR**

Nihon Kohden's 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.

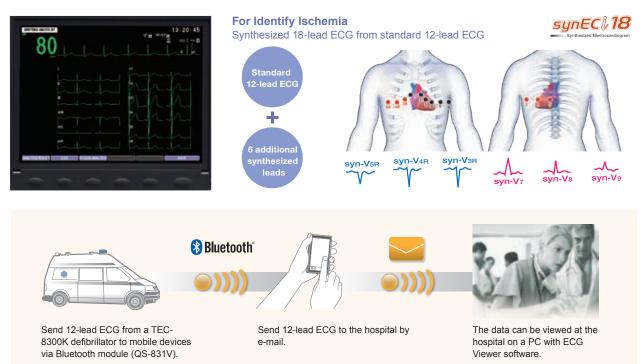
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Post Cardiac Arrest Management

## **Decision support of cardiac arrest care**

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12-lead ECG is mandatory required to find STEMI patient during transportation before arrival to the hospital to contribute to reduce the door-to-balloon time for better outcome. Not only the waveform but also interpretation result helps to support for ECG measurement. In addition to 12-lead ECG, TEC-8300 provides you advanced diagnosis support for STEMI patients with 18-lead ECG, synECi18, which is Nihon Kohden's innovative technology. It does not require any additional electrode and procedure to obtain the additional information. You can automatically have the information of right ventricular and posterior position of ECG.



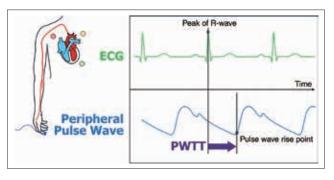
A Bluetooth module is needed to transfer the ECG data to mobile devices. According to each country law, Bluetooth can be requested the registration.

## Redefining quality of care ~ Non-invasive hemodynamics monitoring ~





Nihon Kohden is redefining Quality of Care with new non-invasive technologies like PWTT (pulse wave transit time) and esCCO (estimated continuous cardiac output) by introducing volumetric information to all care levels. esCCO represents a care enhancing and economic solution with no additional running costs or accessories.



Pulse Wave Transit Time derived from ECG and pulse oximetry signal

#### Built-in recorder

A thermal array recorder records various defibrillation information.



#### Self-test indicator

TEC-8300K series have a self check function with daily and monthly test.



#### Connector

Paddles (external paddles, internal paddles and disposable pads) can be easily changed with one connector.



#### Main units

TEC-8321K: ECG, AED, 12-lead ECG, SpO<sub>2</sub>, MULTI connector\* (1) TEC-8322K: ECG, AED, 12-lead ECG, SpO<sub>2</sub>, temperature, MULTI connector\* (2) TEC-8332K: ECG, AED, 12-lead ECG, SpO<sub>2</sub>, temperature, MULTI connector\* (2), pacing TEC-8342K: ECG, AED, 12-lead ECG, SpO<sub>2</sub>, temperature, MULTI connector\* (2), NIBP TEC-8352K: ECG, AED, 12-lead ECG, SpO<sub>2</sub>, temperature, MULTI connector\* (2), NIBP, pacing \* MULTI connector for CO<sub>2</sub>, IBP and temperature

#### **Major options**

- Battery, SB-831V X077	- SD card, Y154D
- Battery charger, SB-801V	<ul> <li>Software for arrhythmia analysis, QS-831V</li> </ul>
- AC/DC module, SC-831V	<ul> <li>esCCO program, QP-002V</li> </ul>
- External paddle, ND-831V	- synthesized 18-lead ECG, QP-004V
<ul> <li>External paddle holder, DP-831VK</li> </ul>	- Viewer software, QP-551VK
- Disposable pads, H329 / H330	- Cart, KD-831V
- Disposable pads adapter cable, JC-865V K342B	- In-vehicle wall mount, KG-831V
- Bluetooth module, QI-832V	- Bed rail hook, YZ-047H4

#### **Specifications**

Dimensions :	334(W) x 362(H) x 262(D) mm
Weight :	TEC-8321/TEC-8322/TEC-8332: 6.8 kg (including one battery pack)
	TEC-8342/TEC-8352: 7.0 kg (including one battery pack)
Display :	8.4-inch color LCD
Energy Selection :	2 – 270J
Operating time :	480 min continuous monitoring (with 2 batteries)
	200 discharges at 270J
	180 min fixed mode pacing (180 pulse/min, 200mA)
Charging time :	within 4 sec to 200J (in both AC and full charged battery)

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