Paramedic CU-ER1

(Automated External Defibrillator)

Someone goes down in cardiac arrest, resuscitation is just a hand away...

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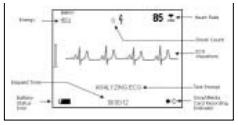
Patented *e-cube* Biphasic measure impedance and deliver efficient defibrillation shock.

Key Features

- **Intelligent Arrhythmia Detector**
- **Efficient and effective *e-cube* Biphasic Truncated Exponential shock waveform**
- **Lightweight and highly portable**
- **Versatile Power Supply**
  - Internal rechargeable battery pack
  - External disposable battery pack
  - AC/DC adapter
  - Car cigar lighter jack
- **Intelligent data management system**
  - ECG of the patient is recorded all throughout the rescue operation.
  - Relevant events (e.g. shock advised, charging, shock delivery) are recorded together with timestamp.
  - Recorded data may be transferred to a PC for archiving and review.
  - Recorded data may be reviewed in the device.
- **Automatic and operator initiated self-tests**
  - Power on test
  - Run-time test
  - Daily / weekly / monthly test

- Size : 305×250×94 (W×L×H, mm)
- Weight : 2.7kg



LCD Screen
Displays
- The ECG of patient
- Energy of the shock to be delivered
- Shock count
- Heart rate
- Battery status
- Elapsed time

Indicator Lamps
Indicates
- Power sources
- Occurrence of system error

SmartMedica Card Port
Nonvolatile memory port for data storage

UART Port
Port for serial data transfer to a PC

IrDA Port
Port for infrared communication with a PC

AC/DC Adapter Port
Port for AC/DC adapter and Car cigar lighter jack

Paramedic CU-ERT (AED Trainer)

- **10 standard Rescue Scenarios**
- **Infrared remote control operation**
- **Powered by an internal rechargeable battery pack or AC/DC Adapter**
- **Simulates all the functions of the Paramedic CU-ER1**

The CU-ERT is a defibrillator simulator designed to mimic the operations of the Paramedic CU-ER1. It can simulate all the functions of the Paramedic CU-ER1 including charging and shock delivery.

• Parts & Accessories

Standard Package
- Device
- Defi pads
- Power cord
- AC adapter
- NI-MH battery
- User's guide
- Quick refernce card

Opition
- Carrying case
- SMC card
- Printer
- Cigar lighter jack car
- ECG cable
- Disposable battery pack
- Software for data managing
- Pediatric pads

Paramedic CU-ER2

(Dual Mode Defibrillator)

Someone goes down in sudden cardiac arrest...
Build up more chances of saving lives with Paramedic Series.

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Variable energy levels selection

Key Features

- AED and Manual Mode Defibrillation
- Synchronized Cardioversion
- ECG Monitoring (3 Lead ECG Cable)
- CPR Coaching in AED
- Lightweight (2.7kg) and highly portable
- Efficient and effective *e~cube* Biphasic Truncated Exponential shock waveform
- versatile Power Supply
  - Internal rechargeable battery pack
  - External disposable battery pack
  - AC/DC adapter
  - Car cigar lighter jack
- intelligent Data Management System
  - ECG of the patient is recorded all throughout the rescue operation.
  - Relevant events (e.g. shock advised, charging, shock delivery) are recorded together with timestamp.
  - Recorded data may be transferred to a PC for archiving and review.
  - Recorded data may be reviewed in the device.
- Automatic and Operator Initiated Self-Tests (power on / run-time / daily / weekly / monthly test)

Paramedic CU-ER3

(Dual Mode Defibrillator +SpO_2 Monitor)

SpO_2 Module (Nellcor)

Key Features

- AED and Manual Mode Defibrillation
- Synchronized Cardioversion
- ECG Monitoring Mode (3 Lead ECG Cable)
- SpO_2 Monitoring (Nellcor SpO_2 Module)
- Heart Rate and SpO_2 Alarm System
- CPR Coaching in AED
- Efficient and Effective *e~cube* Biphasic Truncated Exponential shock waveform
- Lightweight (2.8kg) and Highly Portable
- Versatile Power Supply
- Intelligent Data Management System
- Automatic and Operator Initiated Self-Tests (power on / run-time / daily / weekly / monthly test)

SPECIFICATIONS CU-ER1, CU-ER2, CU-ER3

Common

- **ECG Monitor**
  - Patient Connection : Defibrillation Pads, ECG Electrodes
  - Bandwidth : Monitoring Mode : 0.3 to 40Hz (-3dB)
  - EMS Mode : 1 ~ 30Hz
  - Heart Rate : Digital 30 to 300 bpm (±3bpm)
- **Defibrillator**
  - Waveform : *e~cube* Biphasic (Biphasic Truncated Exponential type)
  - Charging Time : Less than 10 seconds
  - Sensitivity & Specificity : Meets AAMI guidelines
  - Defibrillation Electrodes : Multifunctional electrodes (disposable, Pre-gelled)
- **Voice & Text Prompts**
  - Voice Prompts guide the user through the rescue protocol
  - All user interfaces are supported in local language
- **Data Storage & Management**
  - Internal Flash Memory : 12 Hours of event and ECG recording
  - SmartMedia Card(32M) : 42 hours of event and ECG recording or 1 hour if voice recording is enabled
  - Review the Patient ECG, incident details and device information
  - Transmit multi patient data to PC
- **Display**
  - Screen Type : High resolution display (Graphic LCD)
  - Screen Size : 4 inches (10.16 cm) diagonal, 320 X 240 pixels
  - Sweep Speed : 25mm / sec, nominal
  - Viewing Time : 3.2 seconds
- **Automatic Self-Test**
  - Power on Self-Test / Run Time Self-Test / Manual Self-Test
  - Periodic Self-Test (daily/weekly/monthly)
- **AC Adapter**
  - Input : 100 ~ 240V AC 50 / 60Hz 170VA
  - Output : +12V DC 3.6A
- **Battery Pack**
  - 12V 4.5Ah Nickel-Metal Hydride battery pack (Rechargeable)
  - Charging time : Minimum of 4 hours for full charging
  - Capacity : when new, minimum of 200 shock deliveries (Fully charged)
- **External Link**
  - UART port
  - IrDA port

• Parts & Accessories

Standard Package	Optional
- Device	- Carrying case
- Defi pads	- SMC card
- Power cord	- Printer
- AC adapter	- Ciger lighter jack car
- NI-MH battery	- ECG cable
- User's guide	- Disposable bettery pack
- Quick reference card	- Software for data managing
- SpO_2 Probe (only for CU-ER3)	- Pediatric pads

Differences

		CU-ER1	CU-ER2	CU-ER3
ECG Monitor				
ECG Size	auto-scaled	●	●	●
	5, 10, 20mm/mV		●	●
Defibrillator				
Operating Mode	Semi automatic	●	●	●
	Manual		●	●
Waveform	*e~cube* Biphasic (BTE type)	●	●	●
Energy	AED Mode 150J (default setting)	●	●	●
	Manual Mode : Variable energy levels selection (12 steps escalating, 2, 3, 5, 7, 10, 20, 30, 50, 70, 100, 150, 200J)		●	●
Synchronous Cardioversion	Energy delivery begins within 60ms of the QRS peak		●	●
Control	Manual Mode : CHARGE, SYNC(R-wave), DISARM		●	●
	AED Mode : ANALYZE, PAUSE		●	●
SpO_2				
Pulse Rate	20 ~ 250 bpm (±3bpm)			●
Saturation	70 ~ 100% (±3digits)			●
Perfusion	0.2 %			●
Physical				
Size (W X L X H)	254mm X 309mm X 93mm	●	●	●
Weight	Approximately 2.7 kg	●		
	Approximately 2.8 kg		●	●
Patient Isolation	Type BF	●	●	●
Optional Accessories				
ECG Cable	3 Lead	●	●	●
Package Contents				
SpO_2 Module (Nellcor)				●

Paramedic CU-ER5

(Multifunction Defibrillator / Monitor)

The Paramedic CU-ER5 defibrillator / monitor is
designed to accommodate both basic and advanced life support personnel.

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External Paddle
(Adult, Pediatric)

- Size : 455×365×105 with paddle (W×L×H, mm)
- Weight : 4.7kg (with external paddle)

Specifications

• Defibrillation

- ECG Lead Select	I, II, III, aVR, aVL, aVF, V, Paddle/Pads, Ext ECG
- Waveform	*e~cube* Biphasic (Biphasic Truncated Exponential type)
- Output Energy	Manual : 1~10J, 15J, 20J, 30J, 70J, 100J, 120J, 150J, 170J, 200J AED : 150J (Fixed) Internal Paddle : 1~10J, 15J, 20J, 30J, 50J
- Charge Time	Less than 10 seconds to 150J
- Shock Delivery	Via multifunction defib. electrode pads or paddle
- Patient Impedance	Shock range : 25 Ohm ~ 175 Ohm
- AED Mode	Shock advisory sensitivity and specificity meet AAMI DF-80 guidelines
- Synchronous Cardioversion	Energy transfer begins within 60ms of QRS peak
- Voice & Text Prompts	Multi language support

• ECG Monitoring

- Input	Lead I, II, III (3-lead ECG cable) Lead I, II, III, aVR, aVL, aVF or V (5-lead ECG cable)
- Heart Rate Display	30 to 300 bpm
- ECG Size	5, 10, 20mm/mV and Auto-gain
- Heart Rate Alarm	Less than minimum setting rate / Over than maximum setting rate
- Waveform Sweep Speed	25mm/sec

• SpO_2 Pulse Oximetry (Nellcor)

- Saturation	70~100% (±3digits)
- Pulse Rate	20~250bpm (±3bpm)
- Perfusion	0.2%

• Power

Internal Battery

- Type	Rechargeable / 12V 4.5Ah Ni-MH battery pack
- Capacity	When new, minimum of 200 shock deliveries (200J)
- Recharging Time	Minimum of 4 hours for full charging

External Battery Pack

- Type	Disposable / 15V 4.2Ah $LiMnO_2$ battery pack
- Capacity	When new, minimum of 200 shock deliveries (200J)

AC/DC Adapter

- Input	100~240V AC 50/60Hz
- Output	DC 12V, 3.6A
- Car Cigar Lighter	DC 12V

• Physical

- Dimensions	Without eternal paddle : 254*365*105 (mm) With external paddle : 455*365*105 (mm)
- Weight	4.7Kg (with external paddle)

• Environmental Requirement

- Temperature	Operation : 0℃ ~ 40℃ Storage : -20℃ ~ 60℃
- Humidity	5% ~ 95%

• Display

- LCD Dimensions	4 ″ diagonal (80mm*60mm)
- Type	High resolution mono graphic LCD
- Resolution	320*240 pixels
- Wave Viewing Time	3.2 seconds (ECG)
- Back Light	EL back light

• Data Storage & Management

- Internal Flash Memory	12 hours of event and ECG recording
- Data Card (SMC 32M)	42 hours of event and ECG recording or 1 hours if voice recording is enabled
- Data Transfer to PC	UART / IrDA

• Self-Test

- Power on Self-Test
- Run Time Self-Test
- Manual Self-Test
- Periodic Automatic Self-Test (Daily / Weekly / Monthly)

• Parts & Accessories

Standard Package

- Device
- External Paddle (Adult, Pediatric)
- 3-Lead ECG Cable
- Power Cord
- AC Adapter
- Internal Battery (Ni-MH)
- User's Guide

Options

- Date Card (SMC 32M)
- Thermal Printer
- Printer Paper (10 rolls)
- Cigar Lighter Jack for Car
- Multifunction Defib. Pads
- Adapter for Defib. Pads
- 5-Lead ECG Cable
- ECG Electrodes (50EA)
- SpO_2 module set (probe, extension cable)
- Disposable Battery Pack ($LiMnO_2$)
- IrDA Adapter for Data Communication
- Software for Data Management with Key File (UART Cable included)