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Zubehörliste CARDIO Serie  
Accessory list CARDIO Series



Image Broschüre CARDIO E3  
Image brochure CARDIO E3

# CARDIO E3

Precise multi-channel electrocardiograph device



## Features and Benefits

- 7" high resolution foldable 800 x 480 TFT colorLCD
- Direct printing by various PCL6 compatible printers
- Internal memory to save 1000 ECG reports in multiple format
- Alpha-numeric keyboard and one-touch operation
- Extend printing once arrhythmia is detected
- 5 hours working time with a built-in rechargeable lithium battery
- Three operating modes: Automatic, Manual and Rhythm
- Simultaneous 12 leads ECG acquisition and display
- Simultaneous 3 leads ECG printing with 80mm thermal paper for CARDIO E3
- Pacemaker detection
- Precise ECG auto-interpretation program
- Software upgrade automatically via USB-Stick
- Support external USB printer (PCL 6 language) to print 12 lead ECG reports on A4 size paper
- Support linear barcode reader
- Direct DICOM, GDT HL7

## Affordable versatile 3-channel ECG

CARDIO E3 of medical ECONET offers a wide range of innovative solutions for diagnostic ECG acquisition.

An ECG is typically used as a baseline test for new patients or anyone showing symptoms of heart disease. In a standard 12-lead ECG, ten electrodes are placed on the patient's limbs and the surface of the chest. The overall magnitude of the heart's electrical potential is then measured from twelve different angles and is recorded over a period of time. In this way, the overall magnitude and direction of the heart's electrical depolarization is captured at each moment throughout the cardiac cycle. It's non-invasive, painless, and quick and it's considered one of the best ways to assess heart disease risk.

A normal ECG can be a great reassurance that your heart is functioning well and working harmoniously with your body to contribute to your good health.

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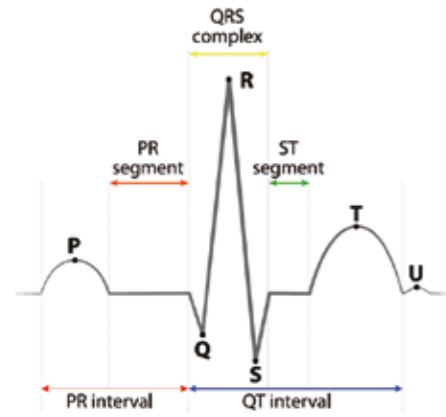
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Händler / Distributor

# CARDIO E3

Precise multi-channel electrocardiograph device



## The Main Function of CARDIO E3

A standard 12-lead electrocardiogram, also known as an ECG, is one of the standard tests used to measure the electrical activity of the heart muscle. It's non-invasive, painless, and quick (it usually only takes five to ten minutes) and also provides information about heart muscle damage, types and kinds of arrhythmias (abnormal heart rhythms), and signs of a heart attack. It's considered one of the best ways to assess heart disease risk.

An ECG is typically used as a baseline test for new patients or for anyone showing symptoms of heart disease. While the average person doesn't need to undergo the procedure very often, those who smoke, have high cholesterol or have a family history of heart disease should consult with their doctor to see how often they should get tested.



## Efficient and User-centered Design

- CARDIO E3 is equipped 7" Color TFT LCD (800X480) display and alpha-numeric keyboard.
- The carrying handle provides mobility enabling you to take fetal monitoring where you need it.
- The recording paper is 80 mm in width, the clearly printed reports include ECG measurement data, patient ID, sex, age, etc.
- Up to 1000 ECGs can be saved in the internal memory. User can export data in various standard file format (PDF, JPG, XML, FDA-XML, SCP, DICOM)
- The device can operate for up to 5 hours with a lithium-ion battery.

## Extendible and Advanced Functions

- Standard 12-lead ECG measures the overall magnitude of the heart's electrical potential from twelve different angles and records over a period of time.
- ECG auto-interpretation improves the correct interpretation of the ECG, facilitating health care decision making and reducing costs.
- Manual mode: Users can select lead group need to be recorded. AUTO mode: The lead groups switch automatically. Rhythm mode: Users can select rhythm lead group and record its rhythm waveforms.
- This device can detect whether there is a pacemaker or not.

# CARDIO E3

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## Specifications

### Dimension

Size:	310 (W) x 244 (D) x 65 (H) mm
Weight:	Approx. 2.1 kg

### Display

Type:	7" color LCD screen, 800 x 480 pixels
Indicator:	Paper Out, Lead Off Alarm, Operation Manual, Patient Information, Battery, Volume, Date and Time, Heart Rate, Working Mode, Paper Speed, Gain, Filter

### Main Machine

Lead:	Standard 12 leads
Measurement Parameter:	HR, PR interval, QRS duration, QT/QTc, R/QRS/T electric axis, RV5/SVI amplitude
Input method:	Floating Ground input with defibrillator protection
Recording mode:	- Manual Mode (Manual 1, Manual 2, Manual 3, Manual 6, Manual 12) - Rhythm Mode - Auto Mode (3CHx4, 3CHx4+1R, 3CHx4+3R, 6CHx2, 6CHx2+1R, 12CHx1)

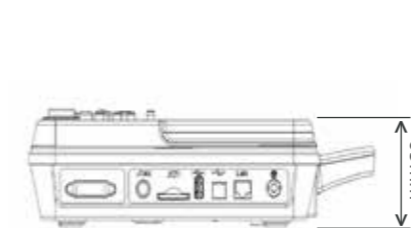
### Filter:

- AC Filter:	50 Hz / 60 Hz / Off
- EMG Filter:	20Hz/25Hz/30Hz/35Hz/40Hz/45Hz / Off
- DFT Filter:	0.05Hz/ 0.15Hz/ 0.25Hz/ 0.32Hz/ 0.5Hz/ 0.67Hz/ ADS/ Off

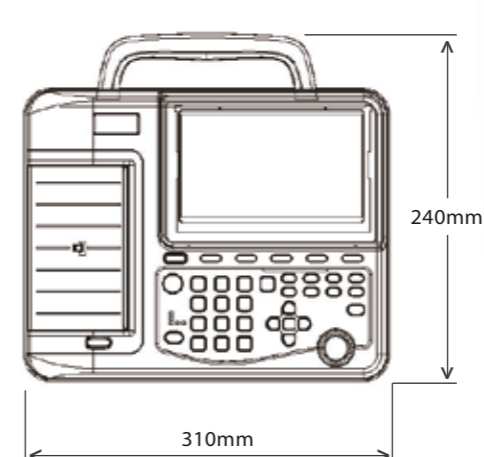
Input circuit current:	≤ 0.1 μA
Input impedance:	≥ 50 MΩ (10 Hz)
Patient leakage current:	< 10 μA
Time constant:	≥ 3.2 s
Frequency response:	0.05 Hz to 150 Hz (-3 dB)
Noise level:	≤ 15 μVp-p
Standard sensitivity:	10 mm/mV ± 0.2 mm/mV
Sensitivity:	1.25 mm/mV, 2.5 mm/mV, 5 mm/mV, 10 mm/mV, 20 mm/mV, 40mm/mV, 10/5 mm/mV, 20/10 mm/mV, AGC, Tolerance ± 5%

Internal calibration voltage:	1 mV ± 5%
Polarization voltage:	± 400mV
CMRR:	> 98 dB

### Right side



### Top



### Packaging



### Recorder

Type:	Thermal matrix printing
Resolution:	≥8 dots/mm(Vertical) ≥ 32 dots/mm (25 mm/s), ≥16 dots/m (50mm/s) (Horizontal)
Record speed:	5mm/s, 6.25 mm/s, 10mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s
Recording Paper:	EM-301: 80mm width rolled paper

### Others

Leads:	Standard 12 leads with defibrillator protection
Safety level:	Class I, CF Type
Fuse:	2-φ5x20 mm AC Time-delay Fuse T1 A/250 V

### Power

Requirements:	100~240 V, 50/60Hz, 50 VA
Output:	DC +19 V / 2600 mAh
Battery:	Built-in rechargeable lithium battery

### Environment Conditions

<ul style="list-style-type: none"> <li>Storage</li> </ul>	<ul style="list-style-type: none"> <li>Temperature: -20 °C to 50 °C</li> <li>Relative humidity: 25% to 95%</li> <li>Atmospheric pressure: 500 hPa to 1060 hPa</li> </ul>
<ul style="list-style-type: none"> <li>Usage</li> </ul>	<ul style="list-style-type: none"> <li>Temperature: +5 °C to 40 °C</li> <li>Relative humidity: 25% to 80%</li> <li>Atmospheric pressure: 700 hPa to 1060hPa</li> </ul>

### Accessory

Standard:	10-lead ECG patient cable	1 ea
	Limb electrodes (4pcs / pack)	1 ea
	Chest electrodes (6pcs / pack)	1 ea
	Paper	1 ea
	Gel	1 ea