

iMAC 300pro 3-Ch ECG Machine Datasheet



1 Overview

1.1 Features Overview

- 1.1.1 Simultaneously 12 leads Acquisition
- 1.1.2 Applicable Range:
Adult and pediatric
- 1.1.3 21 Languages:
Simplified Chinese, Traditional Chinese, English, Ukrainian, Turkish, Russian, French, Portuguese, Spanish, German, Italian, Polish, Romanian, Bulgarian, Croatian, Thailand, Czech, Hungary, Slovenian, Serbia, Greece
- 1.1.4 Built-in protection against defibrillator

1.2 Structure and Composition

- 1.2.1 Screen
5-inch LCD screen with standard grid background; 800*480 pixel
- 1.2.2 Interfaces
2 USB ports, LAN connectors, SD card slot(built-in); Support to connect to keyboard, mouse, card reader, printer and etc.
- 1.2.3 Keyboard
The 9-grid keyboard can input patient information as well as shortcut keys
- 1.2.4 Internal thermal printer

1.3 Power Specifications

- 1.3.1 AC Power
100V-240V, 50Hz/60Hz, 75VA
- 1.3.2 Battery
Rechargeable li-ion battery (10.89V/2600mAh); Working continuously for more than 7 hours.

1.4 Environmental Conditions

- 1.4.1 Operation condition
Ambient Temperature: + 5℃ ~ + 40℃
Ambient Humidity: 20%~85% (no condensation)

Atmospheric Pressure: 57kPa~106kPa

- 1.4.2 Shipment and Storage
Ambient Temperature: -20℃~+55℃
Ambient Humidity: 10%~95%
Atmospheric Pressure: 500hPa~1060hPa

1.5 Dimension and Weight

Equipment: 260mm*180mm*55mm; about 1.2kg (with battery)
Package: 335mm*182mm*265mm; 3.1kg

2 Functions

2.1 Lead System

Standard Wilson, Posterior Wall, Right Chest, Right Chest Posterior Wall, Previous Intercostal Space, Next Intercostal Space, Cabrera, and customized mode.

2.2 Sampling Mode

- 2.2.1 Real-time sampling mode:
Auto-simultaneous, Auto-sequential manual, Rhythm (1-5 min)
- 2.2.2 Pre-sampling mode
- 2.2.3 Triggered sampling mode

2.3 Printing Duration

2.5 sec, 5 sec, 7 sec, 10 sec

2.4 Layout

- 2.4.1 Display Layout: 6×2
- 2.4.2 Built-in Print Layout: 3×4, 3×4+1, 1×12
- 2.4.3 External Print/Output Layout:
3×4, 3×4+1, 6×2, 6×2+1, 12×1

2.5 Algorithm

Glasgow ECG algorithm can make precise diagnosis according to age, gender, race, medication history and etc., especially for AMI, Ventricular Fibrillation, Ventricular Tachycardia, quarterly Bradycardia, malignant arrhythmia, etc.

2.6 Recording and Analysis

- 2.6.1 Pace detection
- 2.6.2 Minnesota code
- 2.6.3 Auto diagnosis
- 2.6.4 Auto measurement
- 2.6.5 R-R histogram
- 2.6.6 R-R chart

2.7 Report Templet

- 2.7.1 Measurement matrix
- 2.7.2 Average templet

Wuhan Zoncare Bio-Medical Electronics Co., Ltd.

Add: #380, High-tech 2nd Road, Eastlake high-tech district, Wuhan, Hubei, P. R. China.

Tel: +86-27-87770203 Fax: +86-27-87770581 Email: info@zoncare.com Website: <https://en.zoncare.com/>

iMAC 300pro 3-Ch ECG Machine

zoncare

Datasheet

2.8 Alarm

- 2.8.1 Bradycardia and Tachycardia
- 2.8.2 Lead-off
- 2.8.3 Recorder unavailable
- 2.8.4 Low-battery

2.9 Support ECG Workstation

2.10 Network

Wi-Fi and cable networking

2.11 Support Graded Gain

2.12 Connectivity

Support direct access to third-party network systems, such as HIS, EMR and other systems.

2.13 Report Formats

ZQECG, JPG, PDF, PNG, XML, HL7, DICOM-JPG, DICOM-PDF, DICOM-WAVEFORM

2.14 Transfer Protocol

Support FTP, Dicom, HTTP and samba transfer protocol

2.15 Storage

- 2.15.1 Local
≥20,000 reports
- 2.15.2 USB (SD card)
Reports can be saved directly in USB (SD card) only when it is inserted. Reports are stored in ZQECG format and can be viewed on our ECG Machine or ECG workstation.

3 Technique Specification

3.1 Sampling Rate

32000 samples per second (or Hz/channel)

3.2 A/D shift

24 bits

3.3 Input Impedance:

≥ 60 M Ω (10 Hz)

3.4 Polarization Resistance

±950mV±3%

3.5 Frequency Response

0.01~ 350Hz

3.6 Time Constant

≥3.2S

3.7 CMRR

≥115dB

3.8 System Noise

RTI, peak-to-valley value: ≤15mV

3.9 Gain

40, 20, 10, 5, 2.5, Auto mm/mV

3.10 Paper Speed

5, 6.25, 10, 12.5, 25, 50 mm/s

3.11 Calibration Voltage

1 mV±2%

3.12 Patient Leakage Current

≤10 μ V

3.13 Recording Mode

Thermal array printer;
8 dot/mm (vertical)
40 dot/mm (horizontal, 25mm/s)

3.14 Paper Specifications

Z-fold Paper; 80mm*70mm*14m
Roll Paper; 80mm×20m

3.15 Filter Setting

AC: off/50/60Hz
Baseline Drift: off/0.01/0.05/0.3/0.6Hz
EMG: off/25/35/45/75/100/150/250/350Hz

3.16 Heart Rate Range

30-350 bpm

4 Standard Accessories

4.1 Main Unit

4.2 Limb Electrodes-Adult/IEC/4 per Set

4.3 Chest electrodes-Adult/IEC/6 per Set

4.4 ECG Cable-ECG Cable/12-lead/banana plug

4.5 Power cord

4.6 Thermal paper-80mm×20m (Roll paper)

4.7 Ground wire-Clip type

4.8 User manual

4.9 Warranty card (with certificate of conformity)

4.10 Instruction card

5 Optional

5.1 Patient Cable

5.1.1 Banana type ECG cable

5.1.2 Snap type ECG cable

5.1.3 Clip type ECG cable

5.2 Electrodes

5.2.4 Chest electrodes-Adult/pediatric

5.2.5 Limb electrodes-Adult/pediatric

5.2.6 Disposable electrodes-Snap Type-Adult/Pediatric

5.2.7 Electrodes adapter Banana type to Snap and Clip type

Wuhan Zoncare Bio-Medical Electronics Co., Ltd.

Add: #380, High-tech 2nd Road, Eastlake high-tech district, Wuhan, Hubei, P. R. China.

Tel: +86-27-87770203 Fax: +86-27-87770581 Email: info@zoncare.com Website: <https://en.zoncare.com/>

5.3 Others

- 5.3.8 Digital ECG workstation
- 5.3.9 Thermal paper
- 5.3.10 Barcode scanner- C520-USB
- 5.3.11 Trolley-TT04
- 5.3.12 Carrying bag- TT05

- 6.3 EN ISO 14971:2012
- 6.4 EN ISO 15223-1:2016
- 6.5 ISO10993-1:2009
- 6.6 ISO 10993-5:2009
- 6.7 ISO 10993-10:2010
- 6.8 EN 1041:2008
- 6.9 EN 60601-1:2006+A1:2013
- 6.10 IEC 60601-2-25: 2011
- 6.11 EN 60601-1-2:2015
- 6.12 EN 62304:2006/A1:2015
- 6.13 EN 62366-1:2015
- 6.14 EN 60601-1-6:2010/2015

6 Adhere to Standards

- 6.1 CE
- 6.2 EN ISO 13485:2016

NOTE

1. The specifications of this system may change without any prior notification.
2. This document contains intellectual property information that is proprietary to ZONCARE and is protected by law. Neither the document nor the information contained therein should be used or reproduced in whole or partially, without prior written agreement consent of ZONCARE.

Aug. 2023