iSE-1210/1810

Electrocardiograph

Version 1.2

Technical Specifications

Physical Specifications

Dimensions

No handle or thermal printer: 270mm(L)×170mm(W)×28mm(H)

With handle: 270mm(L)× 230mm(W)× 52mm(H)

With thermal printer: 274mm(L)× 274mm(W)× 90mm(H)

Weight

1.2 kg (excluding thermal printer, handle, and printer paper)

1.4 kg (with handle, excluding thermal printer and printer paper)

2.3 kg (with thermal printer, excluding handle and printer paper)

Display

10.1" LCD full-touch screen, at a resolution of 1920×1200

Power Supply

Mains Supply	**Internal Li-ion Battery Pack**
Operating Voltage = 100V-240V	Rated voltage = 15.2V
Operating Frequency = 50Hz/60Hz	Rated capacity = 3,550 mAh
Input Current = 1.1A	Operating time: > 8 hours
	Charge time: ≤ 5 hours

HR Recognition

HR Range	**Accuracy**
30 BPM ~300 BPM	±1 BPM

DE12 / DE18 Performance

Leads:	**Acquisition Mode:**
DE12: 12 standard leads	DE12: Simultaneously 12 leads
DE18: 18 standard leads	DE18: Simultaneously 18 leads
A/D Converter:	**Resolution:**
24 bits	0.1192μV/LSB
Sampling Frequency:	**Resolution:**
64,000 /sec/channel	≥5s

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Frequency Response:

0.01Hz ~ 350Hz (-3dB)

Gain:

1.25, 2.5, 5, 10, 20, 10/5 mm/mV, AGC (±5%)

Input Impedance:

≥100MΩ (10Hz)

Input Circuit Current:

≤0.01 μA

Input Voltage Range：

≤±5 mVpp

Calibration Voltage:

1mV±2%

CMRR:

≥140dB (AC on)

≥123dB (AC off)

QTc Formulas:

Bazzet, Fridericia, Framingham, Hodges, and QRS

Pacemaker

Amplitude:

DE12: ±500 μV to ±700 mV

DE18: ±750 μV to ±700 mV

Width:

DE12: 30 μs to 2.0 ms

DE18: 50 μs to 2.0 ms

Filter

AC Filter:

Off/50Hz/60Hz

DFT Filter:

0.01Hz/0.05Hz/0.32Hz/0.67Hz

EMG Filter:

Off/25Hz/35Hz/45Hz

LOWPASS Filter:

350Hz/300Hz/270Hz/150Hz/100Hz/75Hz

Data Transmission

Report Format:

SCP, FDA-XML, DICOM (Encapsulated PDF), DICOM (ECG Waveform), PDF, JPG, BMP, PNG, and TIFF

Data Transmission:

Wi-Fi, Ethernet, 4G network

Data Storage:

100,000 pieces of 10s DAT examination with files

Data Management System:

SE-1515 Data Management System, bi-directional communication

Wi-Fi

Transmitting Frequency:

2.4GHz & 5GHz

Frequency Band:

2412 MHz – 2472 MHz (2.4GHz)

5150 MHz – 5850 MHz (5GHz)

Modulation Type:

DBPSK/DQPSK/CCK

BPSK/QPSK/16QAM/64QAM,GFSK,π/4 -DQPSK,8-DPSK

Transmitting Power:

≤ 17 dBm (2.4GHz)

≤ 17 dBm (5GHz)

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4G (Option)

Bands:

FDD LTE: Band 1, Band 3, Band 8, all bands with diversity

TDD LTE: Band 34, Band 38, Band 40, all bands with diversity

NFC (Option)

Frequency Band:

13.56 MHz

Safety Specifications

Comply with:

EC 60601-1:2005/A1:2012

EN 60601-1:2006/A1:2013

IEC 60601-1-2:2014

EN 60601-1-2:2015

IEC/EN 60601-2-25

Patient Auxiliary Current:

NC <10μA (AC) / <10μA (DC)

SFC <50μA (AC) / <50μA (DC)

Anti-electric-shock type:

Class I with internal power supply

Patient Leakage Current:

NC <10μA (AC) / <10μA (DC)

SFC <50μA (AC) / <50μA (DC)

Anti-electric-shock degree:

CF type with defibrillation-proof

Environment Specifications

Temperature:

Transport & Storage: -20ºC (-4ºF) ~ +55ºC (+131ºF)

Working: +5ºC (+41ºF) ~ +40ºC (+104ºF)

Atmospheric Pressure:

Transport & Storage: 70kPa ~106kPa

Working: 70kPa ~106kPa

Relative Humidity:

Transport & Storage: 15%~95% Non-Condensing

Working: 15%~95% Non-Condensing

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