

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

Operating Voltage = 100V-240V

Operating Frequency = 50Hz/60Hz

Input Current = 1.1A

Internal Li-ion Battery Pack

Rated voltage = 15.2V

Rated capacity = 3,550 mAh

Operating time: > 8 hours

Charge time: ≤ 5 hours

HR Recognition

HR Range

30 BPM ~300 BPM

Accuracy

±1 BPM

DE12 / DE18 Performance

Leads:

DE12: 12 standard leads

DE18: 18 standard leads

Acquisition Mode:

DE12: Simultaneously 12 leads

DE18: Simultaneously 18 leads

A/D Converter:

24 bits

Resolution:

0.1192μV/LSB

Sampling Frequency:

64,000 /sec/channel

Resolution:

≥5s

Frequency Response:

0.01Hz ~ 350Hz (-3dB)

Input Impedance: $\geq 100\text{M}\Omega$ (10Hz)**Input Voltage Range:** $\leq \pm 5$ mVpp**CMRR:** $\geq 140\text{dB}$ (AC on) $\geq 123\text{dB}$ (AC off)**Gain:**1.25, 2.5, 5, 10, 20, 10/5 mm/mV, AGC ($\pm 5\%$)**Input Circuit Current:** $\leq 0.01\ \mu\text{A}$ **Calibration Voltage:**1mV $\pm 2\%$ **QTc Formulas:**

Bazzet, Fridericia, Framingham, Hodges, and QRS

Pacemaker**Amplitude:**DE12: $\pm 500\ \mu\text{V}$ to $\pm 700\ \text{mV}$ DE18: $\pm 750\ \mu\text{V}$ to $\pm 700\ \text{mV}$ **Width:**DE12: 30 μs to 2.0 msDE18: 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, $\pi/4$

-DQPSK, 8-DPSK

Transmitting Power: $\leq 17\ \text{dBm}$ (2.4GHz) $\leq 17\ \text{dBm}$ (5GHz)

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 <10 μ A (AC) / <10 μ A (DC)
SFC <50 μ A (AC) / <50 μ A (DC)

Anti-electric-shock type:

Class I with internal power supply

Patient Leakage Current:

NC <10 μ A (AC) / <10 μ A (DC)
SFC <50 μ A (AC) / <50 μ A (DC)

Anti-electric-shock degree:

CF type with defibrillation-proof

Environment Specifications

Temperature:

Transport & Storage: -20°C (-4°F) ~ +55°C (+131°F)
Working: +5°C (+41°F) ~ +40°C (+104°F)

Atmospheric Pressure:

Transport & Storage: 70kPa ~106kPa
Working: 70kPa ~106kPa

Relative Humidity:

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