SE-1200 Express

Electrocardiograph

Version 1.4

Technical Specifications

Physical Specifications

Dimensions

420mm×330mm×120mm

Weight

≤5kg (Excluding recorder paper and battery)

Display

8 inch, 800×600 multicolor LCD screen (touch screen is optional)

Power Supply

Mains Supply

Operating Voltage = $100V-240V\sim$ Operating Frequency = 50Hz/60Hz

Input Current = 0.9-0.4A

Internal Li-ion Battery Pack

Rated voltage = 14.8V

Rated capacity = 2500/5000mAh

(4/8 normal work hours)

Necessary Charge time: 3/6 hours

Recording

Recorder

Thermal dot-matrix recorder

Recorder Paper:

Folded thermal paper:

210mm×295mm×100pages

Folded thermal paper:

215mm×280mm×100pages (Optional)

Rolled thermal paper: 210mm×30m

(Optional)

Printing Density:

8 dots per mm / 200 dots per inch (amplitude axes)

40 dots per mm / 1000 dots per inch (time axes, @ 25 mm/s)

Paper Speed:

5mm/s, 6.25mm/s, 10mm/s, 12.5mm/s, 25mm/s, 50mm/s (±3%)

External Printer:

HP2010/2132/1050/2000, HPM401/2015/2035,

HP1106/1020P, HP1112/4729/3638, HPM202D/1525/M403D

HR Recognition

HR Range

30 BPM ~300 BPM

Accuracy

±1 BPM

ECG Unit



Leads:

12 standard leads

A/D Converter:

24bits

Time Constant:

>5s

Sampling Frequency:

64,000 Hz

Input Impedance:

 $\geq 100 M\Omega (10 Hz)$ **Input Voltage Range:**

≤±5 mVpp

CMRR:

≥140dB (AC on)

≥123dB (AC off)

Acquisition Mode:

Simultaneously 12 leads

Resolution:

0.1192uV/LSB

Frequency Response:

0.01Hz ~ 500Hz (-3dB)

Gain:

1.25, 2.5, 5, 10, 20, 10/5 mm/mV, AGC

Input Circuit Current:

≤0.01µA

Calibration Voltage:

 $1mV\pm2\%$

OTc Formulas:

Bazett, Fridericia, Framingham, Hodges, QRS

Pacemaker

Amplitude:

 $\pm 750 \mu V$ to $\pm 700 \ mV$

Sampling Frequency:

80,000 /sec/channel, Rhythm Lead

Width:

50μs to 2.0 ms

Filter

AC Filter:

50/60Hz **EMG Filter:**

Off/25Hz/35Hz/45Hz

DFT Filter:

0.01Hz/0.05Hz/0.15Hz/0.25Hz/0.32Hz/0.5Hz/0.67Hz

LOWPASS Filter:

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

Data Transmission

Report Format:

PDF, XML, DICOM, FDA-SCP

Data Management System:

SE-1515 Data Management System, bi-

directional communication

Data Storage:

800 ECGs

Data Transmission:

Wi-Fi, Ethernet, RS232

HIS connection:

DICOM Worklist/DICOM Storage/HL7/GDT

Wi-Fi

Transmitting Frequency:

2400-2497MHz

Modulation Type:

DSSS, CCK, OFDM

Frequency Band:

2400-2497MHz

Transmitting Power:

6 - 17dBm



Effective Radiated Power:

6 - 17dBm

Safety Specifications

Comply with:

IEC 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

 $NC < 10\mu A (AC) / < 10\mu A (DC)$

 $SFC < 50\mu A (AC) / < 50\mu A (DC)$

Anti-electric-shock type:

Class I with internal power supply

Patient Leakage Current:

 $NC < 10\mu A (AC) / < 10\mu A (DC)$

 $SFC < 50\mu A (AC) / < 50\mu A (DC)$

Anti-electric-shock degree:

CF type with defibrillation-proof

Environment Specifications

Temperature:

Transport & Storage: -20°C (-4°F) ~

+55°C (+131°F)

Working: $+5^{\circ}$ C ($+41^{\circ}$ F) $\sim +40^{\circ}$ C ($+104^{\circ}$ F)

Atmospheric Pressure:

Transport & Storage: 70kPa ~106kPa

Working: 86kPa ~106kPa

Relative Humidity:

Transport & Storage: 25%~93% Non-Condensing

Working: 25%~80% Non-Condensing

