

SE-1200 Express

Electrocardiograph

Version 1.5

Technical Specifications

Physical Specifications

Dimensions

420mm×330mm×120mm

Weight

≤4.7 kg (Excluding recorder paper and battery)

Display

8 inch, 800×600 multicolor LCD touch screen

Power Supply

Mains Supply

Operating Voltage = 100V-240V~
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:

Wi-Fi printer: HP LaserJet Pro M202dw, HP DeskJet 3638, HP DeskJet Ink Advantage Ultra 4729, HP LaserJet 108w, HP Laser MFP 136w, HP LaserJet Tank MFP 1005w, and HP LaserJet Tank 1020w

USB printer: HP DeskJet 1110 Printer series, HP DeskJet 2130/HP DeskJet 3630/HP DeskJet Ink Advantage Ultra 4720 All-in-One series, HP LaserJet 400 m401d, HP LaserJet P2035 Printer series, HP LaserJet M403d Printer, HP LaserJet Pro M202dw, HP LaserJet 108w, HP Laser MFP 136w, HP LaserJet Tank MFP 1005w, and HP LaserJet Tank 1020w

HR Recognition

HR Range

30 BPM ~300 BPM

Accuracy

±1 BPM

ECG Unit

Leads:

12 standard leads

Acquisition Mode:

Simultaneously 12 leads

A/D Converter:

24bits

Resolution:

0.1192uV/LSB

Time Constant:

≥5s

Frequency Response:

0.01Hz ~ 500Hz (-3dB)

Sampling Frequency:

64,000 Hz, Rhythm Lead

Gain:

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

Input Impedance:

≥100MΩ (10Hz)

Input Circuit Current:

≤0.01μA

Input Voltage Range:

≤±20 mVpp

Calibration Voltage:

1mV±1%

CMRR:

≥140dB (AC on)

≥123dB (AC off)

QTc Formulas:

Bazett, Fridericia, Framingham, Hodges, QRS

Pacemaker

Amplitude:

±400μV to ±700 mV

Width:

30μs to 2.5 ms

Sampling Frequency:

160kHz, Rhythm Lead

Filter

AC Filter:

Off/50/60Hz

DFT Filter:

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

EMG Filter:

Off/25Hz/35Hz/45Hz

LOWPASS Filter:

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

Data Transmission

Report Format:

SCP, FDA-XML, DICOM, PDF, JPG, PNG, TIFF and BMP

Data Transmission:

Wi-Fi, Ethernet

Data Management System:

SE-1515 Data Management System, bi-directional communication

HIS connection:

DICOM Worklist/DICOM Storage/HL7/GDT

Data Storage:

10,000 ECGs

Wi-Fi

Radio Technology:

802.11a/b/g/n/ac/ax

Modulation Type:

OFDM with BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM and 1024-QAM

802.11b with CCK and DSSS

Frequency Band:

2.4 GHz ISM band & 5 G ISM band

Transmitting Power:

2.4 G:

17 dBm for 802.11b DSSS

17 dBm for 802.11b CCK

17 dBm for 802.11g OFDM

16 dBm for 802.11n OFDM

15 dBm for 802.11ax OFDM

5 G:

15 dBm for 802.11a OFDM

15 dBm for 802.11n OFDM

15 dBm for 802.11ac OFDM

14 dBm for 802.11a OFDM

Safety Specifications

Comply with:

IEC 60601-1:2015+A1:2012+A2:2020

EN 60601-1:2006+A2:2021

IEC 60601-1-2:2014+A1:2020

EN 60601-1-2:2015+A1:2021

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: 86kPa ~106kPa

Relative Humidity:

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

Working: 25%~80% Non-Condensing