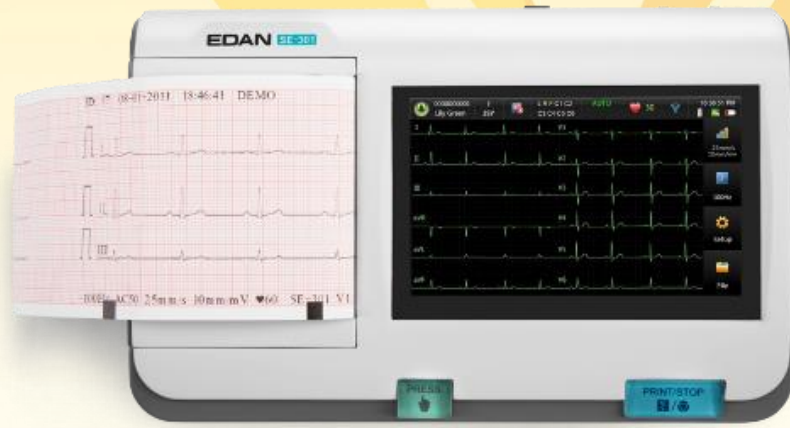


SE-301

Electrocardiograph

Version 1.2



Technical Specifications

Physical Specifications

Dimensions

224 mm×143 mm×54 mm

Weight

< 1kg (Excluding recorder paper and battery)

Display

5 inch, 800×480 multicolor LCD touch screen

Power Supply

Mains Supply

Operating Voltage = 100V-240V~

Operating Frequency = 50Hz/60Hz

Power adapter output voltage: 19V, 2A

Internal Li-ion Battery Pack

Rated voltage = 14.8V

Rated capacity=2500mAh

(5 hours continuous printing, 500 ECG reports)

Necessary Charge time≤3.5 hours

Recording

Recorder:

Thermal dot-matrix recorder

Recorder Paper:

Folded thermal paper,

80mm×70mm×200pages

Rolled thermal paper, 80mm×20m

External Printer:

HP 1010/1510/2010/1050/2000, HP

M401/2015/2035/1525,

HP 1020/1020PLUS/1106, or HP 1505

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%)

HR Recognition

HR Range

30 BPM ~300 BPM

Accuracy

±1 BPM

ECG Unit

Leads:

12 standard leads

A/D Converter:

24 bits

Time Constant:

≥3.2s

Sampling Frequency:

16000 Hz

Input Impedance:

≥50MΩ (10Hz)

Input Voltage Range:

≤±5 mVpp

CMRR:

≥140dB (AC: On)

Acquisition Mode:

simultaneously 12 leads

Resolution:

0.1575 μV/LSB

Frequency Response:

0.01Hz ~ 300Hz (-3dB)

Gain:

2.5, 5, 10, 20, 10/5, AGC (mm/mV)

Input Circuit Current:

≤0.01μA

Calibration Voltage:

1mV±3%

Pacemaker

Amplitude:

±2 to ±700 mV

Sample Frequency

16,000/sec/channel

Width:

0.1ms ~ 2.0ms

Filter

AC Filter:

On/Off (50/60Hz)

EMG Filter:

Off/25Hz/35Hz/45Hz

DFT Filter:

0.01Hz, 0.05Hz, 0.32Hz, or 0.67Hz

LOWPASS Filter:

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

Data Transmission

Report Format:

DAT, PDF, SCP, FDA-XML, DICOM

Data Management System:

SE-1515 Data Management System, bi-directional communication

Data Storage:

800 ECGs

Data Transmission:

Wi-Fi, Ethernet, RS232, 4G Network

HIS connection

DICOM Worklist/DICOM Storage/HL7

Wi-Fi

Transmitting Frequency:

2.4GHz

Frequency Band:

2.400-2.500GHz (2.4 GHz ISM band)

Modulation Type:

OFDM with BPSK, QPSK, 16-QAM, and 64-QAM
802.11b with CCK and DSSS

Transmitting Power:

17 dBm for 802.11b DSSS
17 dBm for 802.11b CCK
15 dBm for 802.11g/n OFDM

4G (Optional)

Bands

FDD LTE: Band 1, Band 2, Band 3, Band 4, Band 5, Band 7, Band 8, Band 20, all bands with diversity
WCDMA/HSDPA/HSUPA/HSPA+: Band 1, Band 2, Band 5, Band 8, all bands with diversity
GSM/GPRS/EDGE: 850 MHz/900MHz/1800 MHz/1900MHz

Rate

GPRS: UL 85.6 kbit/s; DL 85.6 kbit/s
EDGE: UL 236.8 kbit/s; DL 236.8 kbit/s
WCDMA CS: UL 64 kbit/s; DL 64 kbit/s
WCDMA PS: UL 384 kbit/s; DL 384 kbit/s
HSPA+: UL 5.76 Mbit/s; DL 21.6 Mbit/s
DC-HSPA+: UL 5.76 Mbit/s; DL 42 Mbit/s
LTE FDD: UL 50 Mbit/s; DL 150 Mbit/s@20M BW cat4

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 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: 15%~95% Non-Condensing
Working: 15%~95% Non-Condensing