BTL 8 ECG

BTL CardioPoint Flexi ECG

GENERAL CHARACTERISTICS

Display dimensions	2.8"
Display resolution	240 x 320
Overall dimension	82 x 87 x 25 mm
Weight	150 g
Keyboard	Touch panel on device
External printer	Network printer supported
Print speed (mm/sec)	5, 10, 12.5, 25, 50
Sensitivity (mm/mV)	2.5, 5, 10, 20
Print layout	2 x 6 + 1R, 4 x 3 + 1R, 1 x 12 + 0R
Number of leads	12 Leads
Number of displayed leads	1, 3, 12
Electrode set	R, L, F, N, C1, C2, C3, C4, C5, C6 or RA, LA, LL, RL, V1, V2, V3, V4, V5, V6

RECORDING

ECG 12L	10 s, 12 s. 15 s, 20 s
Storage	Maximally 90 ECG on device memory
Heart rate (HR)	30 - 300 bpm
Heart rate accuracy	± 10% or ± 5 bpm whichever is higher
Pacemaker detection	Detects pace pulses of Pulse width: 0.1 ms – 2 ms Pulse amplitude: 2 mV – 250 mV

OPERATING CONDITIONS

Temperature	10 °C to +40 °C
Relative humidity	30 % to 75 %, Non-condensing
Atmospheric pressure	700 hPa to 1060 hPa

TRANSPORT AND STORAGE CONDITIONS

Temperature	-10 °C to +55 °C
Relative humidity	10 % to 85 %, Non-condensing
Atmospheric pressure	650 hPa to 1100 hPa

OTHER

Mains voltage	100–240 V
Frequency	50 – 60 Hz
Protection class	Class I
Input impedance	> 2.5 MΩ
Ingress protection	Comply with the IPx2 requirement as per standard IEC 60529.
Battery	Li-on battery, 3.6 V, 3200 mAh < 8 hours of continuous signal monitoring
Applied part	Type CF
Defibrillation protection	400 J

Amplitude resolution	1 µV ±1 % per LSB, 500 SPS
Dynamic range	AC differential: ±5 mV, DC offset: ±300 mV
Digital resolution	24 bit
Frequency range	0.05 - 170 Hz
Sampling frequency	1000 Hz
Storing frequency	500 Hz
Common mode rejection ratio (CMRR)	> 90 dB (filter off) > 100 dB (filter 50/60 Hz on)
WiFi frequency	2.4 GHz
Communication channel	1 (2412 MHz) to 11 (2462 MHz)
Modulation	DSSS / CCK / OFDM
Effective radiated power	7.92 dBm or 6.198 mW, measured at 11 Mbps

SOFTWARE

REAL-TIME FEATURES

Normal record length	10 s, 12 s, 15 s, 20 s
Rhythm record length	30 s, 1 min, 2 min, 6 min, 10 min, 20 min
Measurement during recording	HR P, PQ, QRS, RR and QT intervals QTc ST segmen Heart axis Vectorcardiogram
Quick ECG	Start a record without the need of entering patient data
Other	Indication of connected ECG devices Lead detection Electrode application indicator

EVALUATION OF RESTING ECG

Interpretive statements	Interpretation statements for adults and paediatrics patients Algorithmic based interpretation statements Word interpretation statements
AVG beat	P, PQ, QRS, QT and RR intervals Amplitudes values QTc (Bazett, Hodges, Friderica, Framingham) Heart axes - values and graphical interpretation ST segment - graphical interpretation
QT manual measurement tool	Using tangent method Caliper QTc value
Vectorcardiogram (VCG)	Methods - Dower, PLSV and QLSV Displaying - 3D graph, 2D Graph
Sudden deatch syndrome screening tool criteria	Seattle criteria 2013 International criteria 2017
Other tools	Signal scrolling Manual measurement tool (a ruler/caliper) User correction of automatic measurements

COMMON FEATURES

Grid size	The smallest grid square is 1 mm in height, 1 mm in width The middle grid square is 5 mm in height, 5 mm in width The large grid square is 10 mm in height, 10 mm in width
Calibration pulse	The height is 1000 µV
Measured leads	I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6
Display layout	2x6 leads 1x6 leads (V1 - V6) 1x6 leads (I, II, III, aVR, aVL, aVF) 1 x 12 leads I, II, III, aVR, aVL, aVF, V1- V6)
Lead order	Einthoven, Cabrera
Speed display settings	5 mm/s, 10 mm/s, 25 mm/s, 50 mm/s, 100 mm/s
Sensitivity display settings	5 mm/mV, 10 mm/mV, 20 mm/mV
Filters	Mains - 50/60 Hz Myo - 20 Hz, 25 Hz, 35 Hz, 90 Hz Adaptive Drift - 0.07 Hz Cubic Spline, 0.05 Hz, 0.25 Hz No filter (frequency range 0.05 - 170 Hz) User filter Refiltration
Heart rate (HR)	16 - 290 bpm
Conclusion	Can be written at any time during the examination
Other functions	V1 -V6 leads to half settings Automatic pacemaker detection (PCM) Entering blood pressure value

REPORT

Properties	Preview Print Selection of pages to print Selection of leads layout to print
Report contains	ECG signal with all the essentials (speed, sensitivity, filters) Information about physician Information about patient Information about device Conclusion Displayed measured values (HR, Intervals, Amplitudes,...)

DATA EXPORT

Export to hospital informational system standards	HL7 DICOM
Export to file system	PDF, SVG or JPEG formats (FAT32 file system)