

ENVITEC

by Honeywell

Advanced

Multi-channel

Data Transmission



ECG

CardiQuant^{BT} Electrocardiograph with radio data

Wireless
Compact and attractive design
Independent PC-ECG

Medical technology
Monitors

CardiQuant^{BT} independent PC-ECG

BT 3/BT 12 is a compact battery powered ECG device which is worn on the body with 3, 6 or 12 channels. It has an integrated electrode contact detector and a heart rate meter, the results of which are displayed on an integrated LCD display. Thanks to the integrated Bluetooth radio data transmission technology, BT 3/BT 12 is able to transmit ECG data online over a range of up to 25 m to a monitor or recording instrument for further evaluation.

BT 3/BT 12 can be used in all medical applications where the long, stiff trunk cables are a problem due to their weight, their motion artifacts or their EMC susceptibility or because they limit the patient in his freedom of motion. BT 3/BT 12 is suitable as a trunk cable substitute for conventional ECG monitors or ECG recorders. Especially significant are the applications in which it is necessary for the patient to move around freely, for example when the patient is undergoing a stress electrocardiogram. Together with the visualization software, BT 3/BT 12 offers an ideal and low-priced

alternative to conventional PC-ECG devices. The housing distinguishes itself through its compactness and simple operability. A removable clip allows the measuring device to be fixed to clothing, a stretcher or hospital bed. A small carrying case allows BT 3/BT 12 to be worn on a belt or around the neck. The operating time of the system is more than 12 hours using two standard AA cells. If the 3-channel version or a lower sampling rate is used, even longer operating times can be reached. The front foil, sampling rate and filter properties are adapted to customer wishes.

Technical Specifications

3 - channel ECG via 4-pin cable
6 - channel ECG (Einthoven and Goldberger) via 4-pin cable
12 - channel ECG (in addition to Wilson V1 – V6) via 10-pin cable

Basic Functions:

Continuous ECG-Measurement
Calculation of heart-rate with acoustical R-Signal
Electrode contact measurement with optical indication

Technical data

Power supply	2 x AA
Common-mode rejection	> 94 dB
Current consumption	< 200 mA (without additional options)
Resolution	< 2.6 µV/Bit ECG, 18 Bit
Operating temperature	0 - 50 °C, < 95% RH (non condensing)
Storage temperature	-20 – 70 °C, < 95% RH (non condensing)
Dimensions (H x B x T)	100 x 60 x 23 mm
Integrated defibrillation protection	
Sampling rate per channel	100 Hz, 500 Hz, optional 1000 Hz
Bandwidth	0 Hz – 150 Hz digital, software filtering on PC

Fulfilled Standards and Regulations

- EN 60601-1: Medical electrical devices – Part 1: General safety definitions
- EN 60601-1-2: Medical electrical devices – Part 1: General safety definitions; Supplemental standard: Electromagnetic compatibility; Requirements and tests
- EN 60601-2-25: Medical electrical devices – Part 2-25: Special definitions for the safety of electrocardiographs
- EN 60601-2-27: Medical electrical devices – Part 2-27: Special definitions for the safety of electrocardiographical monitoring devices