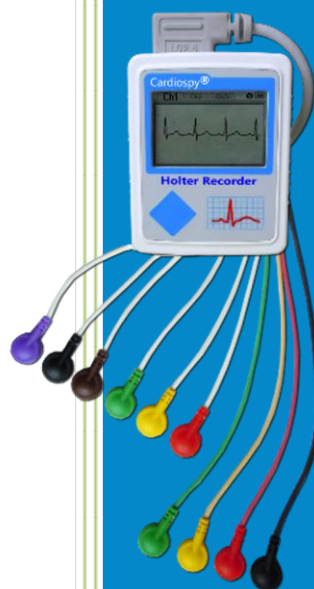
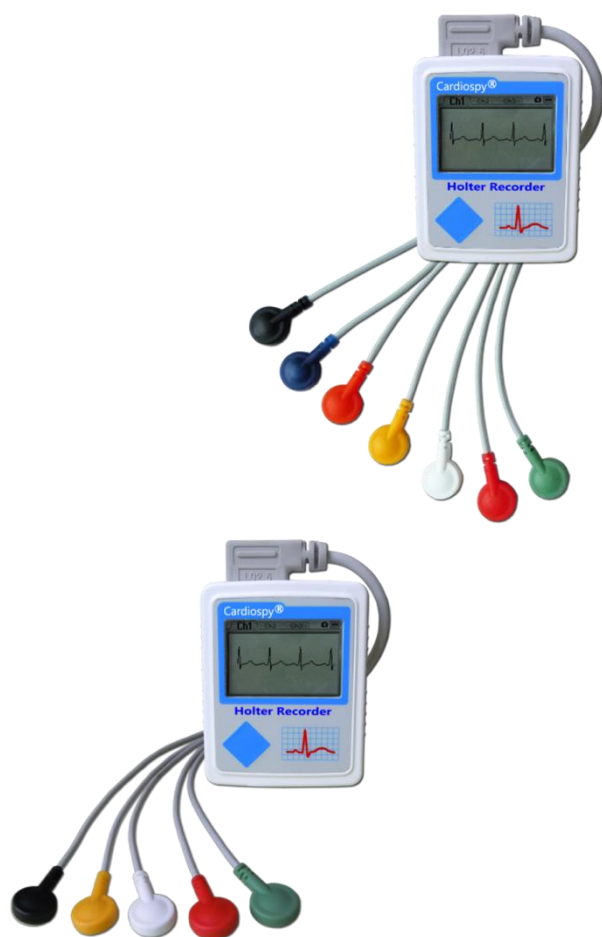


EC-2-3-12H Holter ECG System

Technical specification



| TECHNICAL SPECIFICATIONS OF DIFFERENT HOLTER SYSTEMS | | | |
|--|---|--------------|--------------------------------|
| Type of Holter Recorders | EC-2H | EC-3H | EC-12H |
| Bipolar ECG Channels | 1, 2 | 1, 2, 3 | 1, 2, 3 |
| Other ECG Channels | - | +PM, Nehb | +PM Standard 12 CH, Nehb |
| Respiration | - | Yes | Yes |
| Number of snap type Leads | 3, 5 | 3, 4, 5, 7 | 3, 4, 5, 7, 10 |
| Recording duration maximum (without battery changing) | 48h | 48h | 24h |
| The battery can be changed during recording | Yes | | |
| Recording duration maximum (with battery changing) | 336h | | |
| Dynamic Bandwidth | ±20 mV | | |
| DC Offset Range | ±600 mV | | |
| Frequency Response maximum | 0.05 Hz ... 150Hz | | |
| Sampling Rate | 125 Hz, 250 Hz, 500 Hz, 1000 Hz | | |
| Recording Rate | 125 Hz, 250 Hz, 500 Hz, 1000 Hz | | |
| Common Mode Rejection Ratio | 120dB | | |
| A/D Resolution | 16 bit | | |
| Input impedance | >100 MΩ | | |
| Power Source | 1x1.2 V AAA NiMH (or 1x1.5 V AAA alkaline) | | |
| Battery Life | min. 24 h, up to 48 h using a high-capacity battery | | |
| Storage Card Capacity | built-in 8GB (microSD) | | |
| Internal Voltage (max) | 3.3 V | | |
| Display | LCD (Grey Scale 160x100 pixels) | | |
| Movement detection-3D | Yes | | |
| Patient Event button | Yes | | |
| Monitoring ECG | On PC via Bluetooth and on LCD as well | | |
| Reading Record | via USB cable | | |
| International Protection Rating Against Water: IPX0 | Yes | | |
| Size | 53 x 67.5 x 18.5 mm | | |
| Weight | ~ 50 g | | |

BASIC FUNCTIONS OF SOFTWARE**DATABASE FUNCTIONS**

| | | |
|---|-----------------------------------|--|
| • Common database for all Labtech system | • Record recycle bin function | • Search records |
| • Acquire Patient ID from barcode reader | • System log | • Local database, Network database: Microsoft SQL Server database, SQLite database |
| • Acquire Patient ID using magnetic card reader | • Filter records | • Different date format |
| • Medical record for patients | • Import – export records | • Password protected software starting |
| • Access control | • Import – export records by date | |

BASIC FUNCTIONS

| | | |
|---|--------------------------|---------------------------------|
| • Automatic update | • Normal and MSI install | • Full screen mode |
| • HIS integrations: GDT, DICOM MODALITY WORKLIST, Cardiospy SDK | • Two display mode | • Cubios HRV export |
| • FTP integration | • Email function | • AHA / IEC electrode placement |

PRINT AND EXPORT FUNCTIONS

| | | |
|--|---------------------------|---|
| • Report printing and exporting | • Automatic print | • Selectable reports |
| • Color and Black and white reports | • Contrast settings | • Resizable resolution |
| • Customizable company logo | • Automatic diagnosis | • Custom report |
| • Adjustable paper speed and amplitude | • Import /Export settings | • Export ECG data to CSV, SCP, Dat format |
| • Export QRS data | • Export N-N intervals | • Export R-R intervals |

HOLTER SOFTWARE FUNCTIONS

| | | |
|--|---|---|
| • Make new record using PC or recorder display | • Raw ECG visualization after reading to PC | • Visualization of evaluated record on PC |
| • Store the Indication and medication of the patient | • Awake, Asleep and special time | • Smoothing, baseline, mains filters |
| • Event Viewer | • Colour-coded event marking | • ST level/ST slope diagrams |
| • QT – QTc – QT% diagrams | • QRS – PQ diagrams | • Atrial fibrillation and atrial flutter screen |
| • Battery status | • Noise detection and editor | • Lead off warnings |
| • Detailed ECG Visualization | • QRS Detection | • Adjustable parameters for analysis |
| • HR and ST Graphs | • Arrhythmia Analysis (N,S,V) | • Full ECG Visualization |
| • Measuring possibility on the ECG | • Insert and delete QRS | • Rename QRS |
| • Mark noisy intervals | • Delete single/group events | • Patient event view |
| • Sleep apnea detection | | |

ADDITIONAL FUNCTIONS OF DIFFERENT HOLTER SYSTEMS

| | EC-2H | EC-3H | EC-12H |
|--|-------|-------|--------|
| P-wave detection | + | + | + |
| Motion Detection | + | + | + |
| QRS Template Classification | + | + | + |
| QT Analysis | + | + | + |
| HRV Time Domain | + | + | + |
| AV block I-II-III Analysis | + | + | + |
| Atrial Fibrillation & Flutter Analysis | | + | + |
| HRV Frequency Domain | | + | + |
| Pacemaker Analysis | | + | + |
| Vector cardiography | | + | + |
| T Alternant | | | + |
| HR Turbulence Analysis | | | + |
| Respiration | | + | + |

SOFTWARE MINIMUM CONFIGURATION

| | |
|------------------|---|
| Processor | minimum: Intel® Core™ i3 recommended: Intel® Core™ i5 or better (Sandy Bridge or newer architecture) |
| RAM | minimum: 4 GB; recommended: 8 GB |
| Graphics card | DirectX 10 compatible, min. 128 MB video memory |
| Display | minimum: min. 1280x800 resolution recommended: 22" monitor 1920 x 1080 resolution (Full HD) |
| HDD | 500 GB (SATA II or newer recommended) |
| Interface | 1 USB port for the EC-2H/3H/12H/ABP recorder 1 USB port for the USB-02 key 1 USB port for the printer |
| Printer | Laser (printing speed: 15-20 page/min, color printer recommended) |
| Operating system | Windows 7, Windows 8, Windows 8.1, Windows 10 (32-bit or 64-bit versions) |

*Windows XP is no longer supported by Microsoft. Labtech provides only limited support for previously installed systems.