CARDIOLINE

Enter the Cardioline world

Cubeholter
Holter analysis software

- 3 and 12 channel recorders from 250 to 1,000Hz. from 24 hours to 7 days.

- Patient data can be entered in the recorder from a work-list or simply typed in manually.

- Principal ventricular and supra ventricular arrhythmias, atrial fibrillation and paced beats are classified and presented in different formats.

- Optimized algorithms provide quick and reliable analysis to be printed immediately or verified through a step by step workflow.

- Heart beat detection and artifact rejection are automatically performed by new powerful award winning algorithms.

- Recordings can be quickly downloaded locally or remotely.

- The software distingueshes between auditing technician and reporting physician.

- HRV, QTc and ST analysis are automatically computed and presented in graphic or tabular mode.

- The software generates a final report that can be exported. Raw data for the full test can be stored in the Cardioline ECGWebApp Holter and analyzed from any location.

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Features

Cubeholter is a next generation Holter analysis software, designed for fast and reliable review of multi-day ECG recordings. Workflow is streamlined and operations are simplified, from recorder preparation to printing of the final report. Best in class algorithms classify heart beats, paced beats and arrhythmias and present results in multiple formats. HRV, QT and ST analysis are also attached to the final report.

Cubeholter analysis software is the best solution in a variety of different environments, ranging from single workstation to multi location data upload and reviewing stations.

Cubeholter analysis software can be associated with the Cardioline ECGWebApp Holter for true web handling of your Holter recordings.

Technical specifications

Recordings	
Functions	Prepare recorder with patient data, import recording, delete recording
Archive	Local database, 1.000 tests recommended limit
Recording types	From 1 to 12 leads, 250, 500 or 1000 samples/second, 24, 48 or 1 week duration
Automatic analysis	
Analysis windows	RR, Template, Events, ST, QT (Bazett, Fredericia, Hodges), HRV
Classified heart beats	Normal, ventricular, supra-ventricular, paced, artifact
Detected arrythmias	Atrial fibrillation, bradycardia, tachycardia, supraventricular couplets, ventricular triplet and ventricular run, supraventricular save, idioventricular rhythm, supraventricular tachycardia, ventricular couplets, ventricular tachycardia, bigeminy, trigeminy, pause, junctional rhythms
Paced beats	Failure to capture, undersensing, oversensing detection
Special algorithms	Noise and artifact rejection. Atrial fibrillation
Customizable report	Pre-compiled summary
	Trends: RR/HR, Events, ST, QT, HRV. Tables: RR/HR, Events, ST, QT
	ECG: RR max/RR min, Event strips, Templates, ST Analysis, QT, HRV
Connectivity	
Worklist	Receives worklist from HIS in different formats (DICOM, HL7, GDT)
Recordings	Uploads recordings locally or from remote download stations, trough web-uploader software
Final report	Exports PDF or PDF+ whole recording when Integrated with ECGWebApp Holter

Workstation minimum Hardware requirements

Operating system: Windows 7 or higher, 32 or 64 bit **Processor:** Intel core i5 or higher **RAM:** More than or equal to 8GB **Free space on Hard Disk:** At least 2GB for the program plus space for data archive **Screen:** 16:10 form factor @ 1600x1050, 22" or more **USB:** At least 1 USB port **Printer:** Laser B/N or Color **Safety standard:** IEC 60950-1

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Walk400h

3-12 lead ECG Holter recorder - up to 7 days and to 1000 Hz

- High resolution recordings with user selectable sampling rates of 250/500/1000 samples/second.

- 5/7/10 wires patient cable for 3 to 12 lead recordings.

- Signal bandwidth equivalent or superior to resting ECG.

- Recordings up to 7 days.

- Simple and intuitive user interface. Recorder is equipped with a color LCD display with 4-way joystick that allows for easy navigation of menus.

- Voice recorder for patient identification.

- Light and small: only 100g for maximum patient comfort.

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Technical Specifications

ECG leads	Up to 12-Leads
Patient cable	5 wire cable – 3 unipolar channels
	7 wire cable – 3 bipolar channels
	10 wire cable – 8 channels/12 Leads (standard ECG assembly)
CMRR	> 85dB
Input DC impedance	> 60MOhm
A/D converter	24 bit 96000 samples/second/channel
ECG resolution	<1 µV/LSB
Dynamic range	+/- 400 mV
ECG bandwidth	Performance equivalent to 0,05 - 300 Hz (at 1000 c/s)
Filters	Linear phase digital diagnostic high-pass filter (compl. with IEC 60601-2-25 2nd ed.)
Pacemaker detector	Hardware detection combined with digital convolution filtering
	Complies with 60601-2-47 201.12.4.4.109.
Patient cable recognition	Automatic identification of patient cable used
Maximum recording duration	500/1000 samples/second/channel: 48 hours
	250 samples/second/channel: 7 Days
	Regardless of the number of channels
Internal memory	16 GB SD data card Capacity above 100 3-channel recordings, 24 hours at 250 c/s
Data transfer	USB 2.0

USB cable
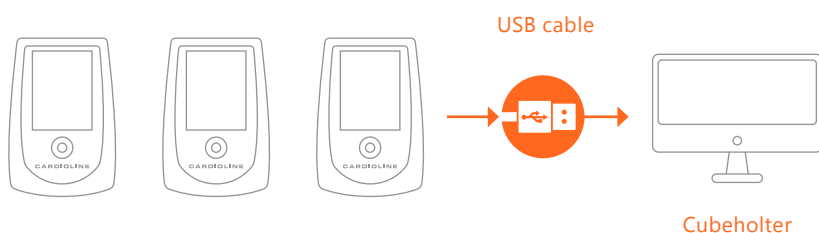
Cubeholter

Holter recordings can be downloaded via USB from the recorder to Cardioline Cubeholter SW for analysis and report generation.

Holter recordings from different recorders can be uploaded to the Cardioline Web Holter remote for analysis and report generation. Ideal for TeleHealthcare applications.

ECGWebApp Holter

Download station

Reporting