

CardioSecur Pro

22-Lead ECG

Outshining the Gold Standard



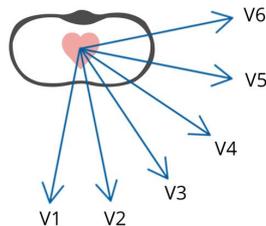
www.cardiosecur.com

Made in Germany

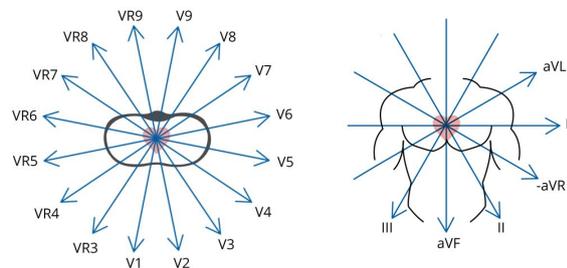
360° View of the Heart

CardioSecur Pro is a mobile, 22-lead ECG for medical personnel that is connected to an iPhone or iPad. It accomplishes much more than a standard 12-lead ECG. The ECG recordings are comprised of the standard 12-leads as well as V7 through V9 and VR3 through VR9. In addition to complex arrhythmias, CardioSecur is the only system that makes it possible to recognize infarcts of the anterior, lateral, and posterior walls of the heart. The European Society of Cardiology guidelines recommend examining the posterior and right walls of the heart. CardioSecur is the only system that practically implements this guideline into its measurement process.

Classic 12-lead ECG:
A 100° view of the heart



CardioSecur 22-lead ECG:
A 360° view of the heart

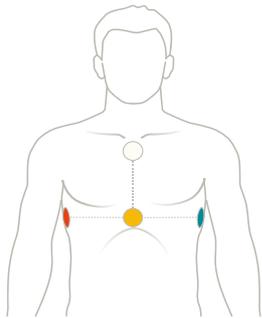


We developed **CardioSecur** especially for medical personnel. The ultra-lightweight cable (50 g) requiring only 4 electrodes and an app is truly one of a kind worldwide. Like the “brother” of the stethoscope, CardioSecur can be used wherever it is needed: **directly by the patient**. Recording a comprehensive ECG has never been so quick and intuitive. The app’s communication features are ground-breaking in comparison to those of a conventional ECG. CardioSecur’s lead system has been validated in numerous studies. CardioSecur Pro is approved as a class IIa medical product.

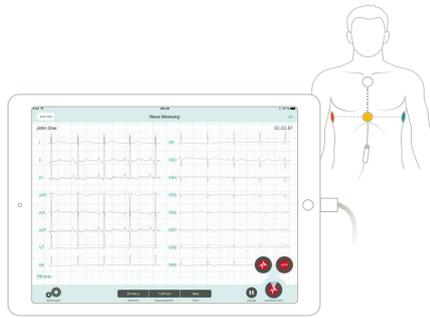
Application

The **CardioSecur ECG cable** connects directly to your iPhone or iPad. The optional GDT interface makes it possible to connect to your practice software or Hospital Information System (HIS). CardioSecur also offers the options of automatic interpretation or automatic parameter measurement.

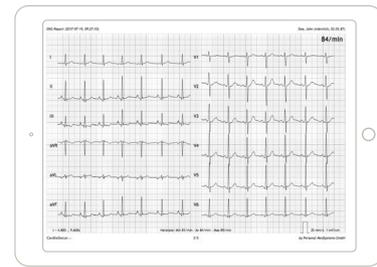
Receive an ECG report in just 3 easy steps:



1. Attach the cable



2. Start a reading



3. Receive an ECG report

Thanks to the **manageable size** and easy communication features, you can take CardioSecur with you anytime and anywhere to make a comprehensive diagnosis. Using the zoom function, you can intuitively analyse the details of individual ECG segments. 10,000 minutes of ECG recordings require 1 GB of storage capacity. These can be saved on your device and sent to a colleague as a PDF or printed via AirPrint.

Technical Details

- 12-/22-Lead ECG (I, II, III, aVR, aVL, aVF, V1-V6 plus V7-V9 and VR3-VR9)
- Ultra-lightweight ECG cable (only 50 g) with only 4 electrodes
- ECG recordings of up to 30 minutes each
- Communication via GDT, email, iMessage, iCloud Drive, AirDrop and AirPrint
- ECG System: Bipolar, measurements from 3 channels
- ECG Storage: 10,000 minutes of recording per 1 GB
- Heart rate: 18 to 256 beats per minute
- Bandwidth: 0,05 to 40 Hz, Sampling rate: 250 Hz
- Disposable electrodes: YD43-6-W, Type P-00-S/xx
- CardioSecur is available in the App Store (requires iOS 7.0 or higher)
- Optimised for iPhone, iPad mini, iPad and iPad Pro

CardioSecur uses an effective electrode system based upon the EASI standard^{1,2}. Frank established the basis of this lead system in the 1960's, which Dower³ further developed into the standard that is used today. CardioSecur has further developed the EASI standard so that it only requires four electrodes. The positioning of the 4 electrodes creates a tetrahedron, which captures the entire heart and computes all 22 leads (I, II, III, aVR aVL aVF, V1-6, plus V7-V9 and VR3-VR9)

1) Accuracy of the EASI 12-Lead electrocardiogram compared to the standard 12-lead electrocardiogram for diagnosing multiple cardiac abnormalities; J Electrocardiol. 1999; 32 Suppl: 38-47. 2) Comparison of waveforms in conventional 12-lead ECGs and those derived from EASI leads in children; J Electrocardiol. 2003; 36(1): 25-31. 3) Dower, G.E., The ECGD: a derivation of the ECG from VCG leads. Journal of Electrocardiology, 1984. 17(2): p. 189-91.; Dower, G.E., H.B. Machado and J.A. Osborne, On deriving the electrocardiogram from vectorcardiographic leads. Clinical Cardiology, 1980. 3(2): p. 87-95; Dower, G.E., et al., Deriving the 12-lead electrocardiogram from four (EASI electrodes. Journal of Electrocardiology, 1988. 21 Suppl: p.S. 182-7.

Overview of Benefits

Price

Instead of a high investment of €5,000 or more for a conventional 12-lead ECG device with set feature usage, CardioSecur offers a flexible feature and price model:

starting at 9,95 € / month

+ 199 € once
(cancellable monthly)

Save high one-time costs, use a system especially designed for medical personnel, and have the option to cancel monthly without having to state your reason for doing so. You can also change your individual features (12 leads, 22 leads, automatic interpretation, etc.) on a monthly basis.

Subscription Benefits

- The CardioSecur app and all future updates
- Continuous further development and maintenance of the data protection compliant medical device platform
- Local archival of your ECG recordings in the app
- Allocate ECGs to each patient and insert comments
- Send or print ECGs directly from your iPhone or iPad (e.g. Email, iChat, Airdrop)
- Option: 22 leads
- Option: automatic interpretation or parameter measurement via the HES algorithm
- Option: data transmission to your Hospital Information System (HIS) via a GDT connection

CardioSecur

Knows Your Heart



CardioSecur is an innovation of Personal MedSystems GmbH
ISO 13485 certified by TÜV SÜD



Personal MedSystems GmbH
Wilhelm-Leuschner-Straße 41
60329 Frankfurt

+49 (0) 69 9072013 0
info@cardiosecur.com

Available at:
www.mobile-ecg.com

Download the CardioSecur Pro app in the App Store

