

PocketECG, a breakthrough in ECG analysis and arrhythmia diagnosis



PocketECG is the only technology to combine the accuracy of full Holter analysis and the interactivity of hospital telemetry at a patient's home.

PocketECG identifies in real time the morphology of each heartbeat and allows remote monitoring of thousands of patients simultaneously. It is the only solution available worldwide enabling physicians to have direct insight into ongoing ECG recording through a standard internet browser window.

The most advanced cardiac monitoring technology

In many cardiovascular diseases symptoms occur and disappear suddenly. In such cases making an accurate diagnosis requires longer hospitalization, which is both inconvenient and costly. PocketECG empowers the patient to live the normal daily life while being constantly monitored. All anomalies are analyzed and occurrences of sudden heart rhythm disturbances are immediately transmitted to the physician.

The most accurate device in diagnosing intermittent and transient cardiac conditions

Symptoms such as chest pain, dizziness or palpitation will be transmitted as an ECG data stream and will help specialists identify the underlying source of the problem and suggest the best therapy. PocketECG provides a very effective tool in explaining the causes of syncope that may be of cardiovascular origin.

Detects every symptomatic and asymptomatic arrhythmia over days, weeks or months

Many cardiac conditions cannot be diagnosed based on a single ECG test or by using standard diagnostic methods of arrhythmia detection. By enabling continuous monitoring of heart rhythm and a patient's physical activity over many days or weeks, PocketECG makes precise diagnosis possible in many previously undiagnosed cases.

Analyzes and correlates every symptom with arrhythmia and automatically monitors patient's physical activity

Such data are then correlated with the ECG recording and a patient's physical activity monitored automatically using a built-in accelerometer. All these data can be accessed by the physician in real time.

Suited to support all arrhythmia management needs

The PocketECG device was designed to provide physicians with complex support in planning anti-arrhythmic therapy. Specifically, it enables physicians to control the most significant parameters of a patient's heart rhythm disturbances.

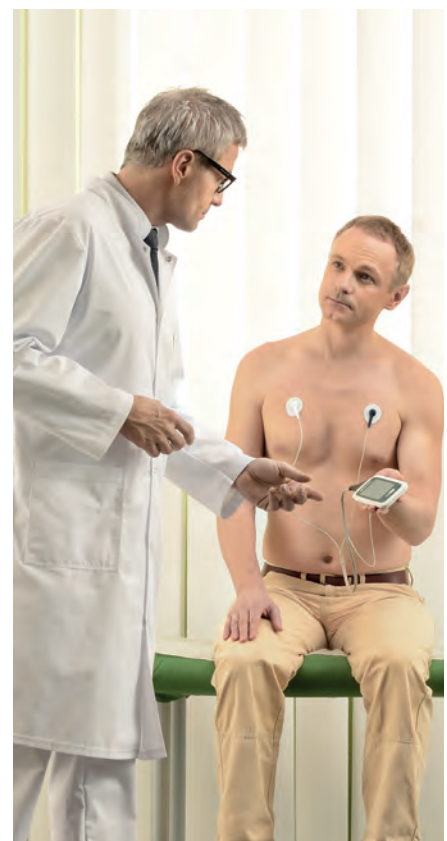
Holter analysis duration can be extended during monitoring due to online access to the ongoing data

One of the key benefits of using PocketECG as a classical Holter is its flexibility in prolonging the monitoring session depending on systematically generated results, for instance when the expected symptoms or arrhythmias have not occurred. This option makes the diagnostic session last precisely as long as needed - instead of being limited to 24 or 48 hours artificially.

Online, continuous ECG

As an unobtrusive but constant companion for the patient, PocketECG helps identify asymptomatic arrhythmias and those occurring while the patient sleeps. The device's interactivity and its touch screen enable the patient to directly provide information about the type of symptoms while experiencing them. Also syncope without a determined cause, paroxysmal palpitation and other sudden symptoms are always reflected in the complete ECG recording.

Ongoing transmission of the continuous ECG facilitates searching for any ECG fragment using standard Internet browsers. Such information enables identification of the onset of arrhythmia, often preceding the first symptom by many hours or even days.



Online rate and rhythm analysis

The system allows detailed diagnosis of atrial fibrillation with single heartbeat accuracy, which is important to precisely evaluate the efficacy of ablation. The high resolution of the signal also enables constant updates of accurate “rate and rhythm” analysis, which is invaluable in a pharmacotherapy of arrhythmia and in determining the recommended dosage of medications while observing their impact on the patient’s heart rhythm.

Online HRV monitoring

Identifying the morphology of each heart beat helps to analyze the frequency of ventricular and atrial ectopic beats occurrences. It also helps detect ventricular and supraventricular tachycardias and complex arrhythmias such as ventricular and supraventricular bigeminy and trigeminy. Such detailed analysis enables the conduction of a reliable Heart Rate Variability (HRV) analysis and ongoing monitoring of HRV changes.

PVC count during exercise and recovery

Equipped with an accelerometer, Pocket-ECG enables ongoing analysis of the correlation between arrhythmia and a patient’s physical activity. This in turn allows physicians to determine the impact of the patient’s physical activity on the occurrence of different types of arrhythmia and to evaluate the occurrence of arrhythmia during physical effort and in the “exercise recovery phase”.

Combining Electrocardiograph, Holter, IVR and ePro systems in one unified technology

PocketECG is an effective tool for the evaluation of the cardiac safety of drugs through TQT studies. It has been designed to provide constant access to high resolution data gathered simultaneously from many centers in real time. Its multimedia interface helps gather IVR information while the easy to use and customizable touch screen helps obtain additional ePro information from the patient.

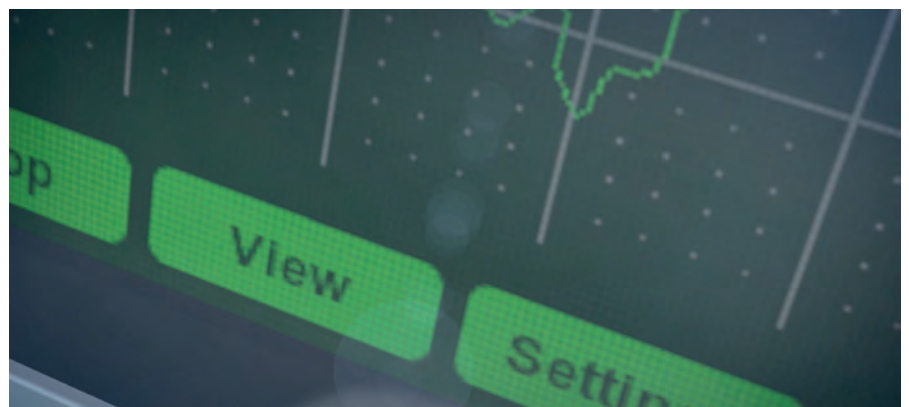
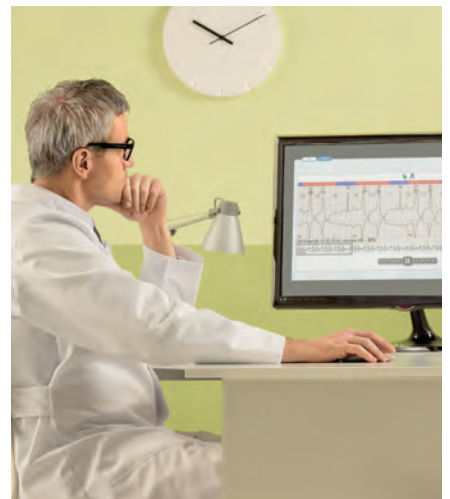
Optimizing cost and increasing effectiveness of healthcare providers

Our patient monitoring system used by patients waiting for surgery or on post-surgery observation increases the quality of service and patients’ safety while reducing the cost of treatment. PocketECG facilitates efficient management of available hospital beds making it possible to discharge patients earlier while extending their outpatient post-surgery observation. Such a solution allows hospitals to serve more patients while at the same time increasing the quality and safety of patient care.



Avoiding Unnecessary Readmissions for Congestive Heart Failure

Ongoing monitoring of patient’s physical activity makes it possible to monitor changes in the heart’s reactions to increased effort. Precise analysis of the morphology of each heartbeat facilitates monitoring of Heart Rate Variability dynamics, which makes it possible to predict potential hospital readmission of heart failure patients and at the same time avoid “unnecessary readmissions”.



Medicalgorithmics S.A. is born out of passion. We love what we do and we derive satisfaction from the fact that our enthusiasm helps change the world.

In cooperation with our partner companies, we are expanding our presence on the world's markets of cardiovascular monitoring, arrhythmia diagnostics, post- and pre-surgery monitoring, step-down care monitoring, cardiac rehabilitation,

and Cardiac Safety. PocketECG is used by hundreds of healthcare institutions in the United States, European Union, Asia and Middle East for simultaneous monitoring of thousands of patients.

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