

BIOMONITOR III m

Maximized Precision.
Minimized Workload.



RhythmCheck Algorithm.

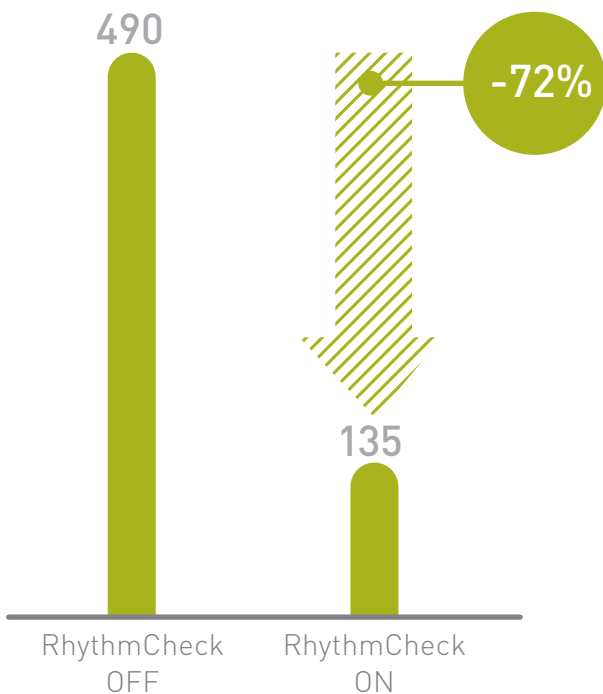
Minimize False Positive AF Detections.

Maximized Precision.

Ectopy is the most common cause for false positives detections, increasing clinician workload. With RhythmCheck, BIOMONITOR III^m significantly reduces false positive AF detections and provides ectopy count and trend data for the last 240 days.

- 52% of false positive AF detections are due to ectopic beats¹
- RhythmCheck* eliminates 72% of false positive AF detections²
- For maximum precision, RhythmCheck dynamically adjusts to each patient's unique rhythm

False positive AF episodes



Reduction in false positive AF detection



AF Sensitivity



AF-Positive Predictive Value

AF Detection Performance

No Loss AF Detection
Uncompromised sensitivity – all true AF episodes were detected.

1. Afzal et al. Heart Rhythm. 2020, 17.

2. BIOTRONIK Data on file: Performance of BIOMONITOR III^m Ectopy Rejection Parameter in Patients with Ectopy.

3. Depending on parameter configuration. BIOTRONIK AF Detect Analysis data on file 2019. PPV and sensitivity from analysis of BIOMONITOR III algorithm in patients with known AF from BIOTRONIK AF Detect Study.

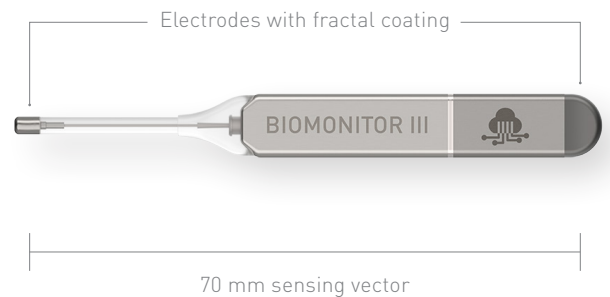


Unique BIOvector Design. For optimal sensing.

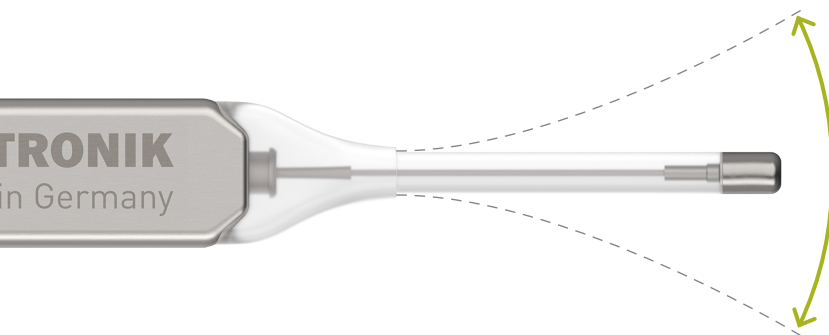
Small Device, Long Vector

The BIOvector design combines a small device design for patient comfort with a long sensing vector for optimal sensing.

- Unique enhanced sensing vector
- Electrodes with fractal coating for high amplitude signal quality



Dimensions _____ 77.5 × 8.6 × 4.6 mm
Weight _____ 4 g
Volume _____ 1.9 cm³



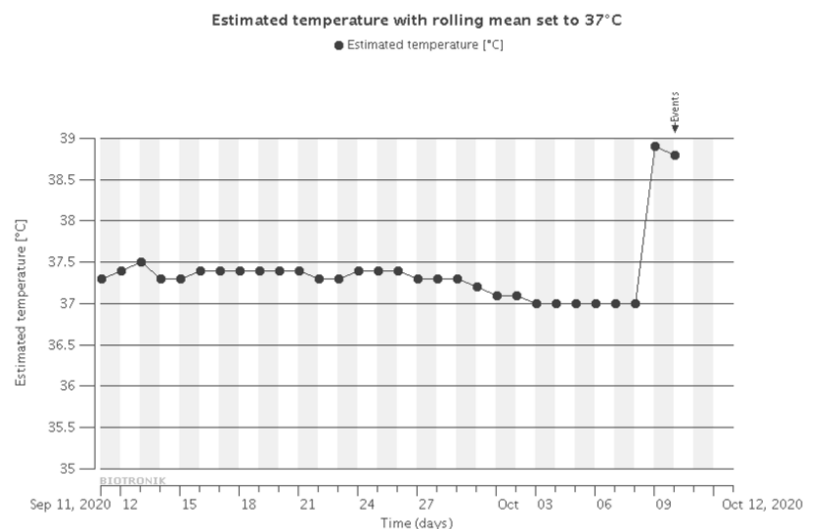
Adapts to Patient Anatomy for High Patient Comfort

Flexible antenna

The flexible antenna adapts to the patients individual anatomy, avoids physical tissue stress and enhances patient comfort.

NEW Vital Data Sensor

With BIOMONITOR III^{Im} Vital Data Sensor, fever can be monitored remotely and hands-free which enables more effective “at home” care. Provides daily data trending which may be helpful in determining need for follow-up. Protects caregivers from added exposure risk and frees up healthcare resources for patients with more severe conditions.





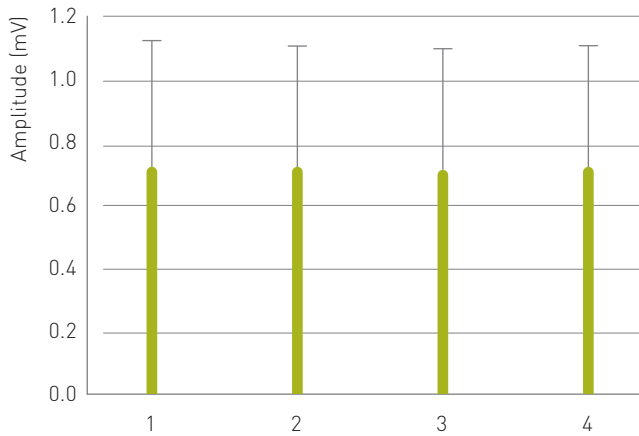
High Quality Signal. Easy Rhythm Classification.

High R-Wave Amplitude of 0.7 mV¹

High R-wave amplitudes are the basis of reliable arrhythmia detection using R-R irregularity.

- Mean R-wave amplitude of 0.7 mV
- Stable R-wave amplitudes over time

Mean R-wave amplitude (+SD)



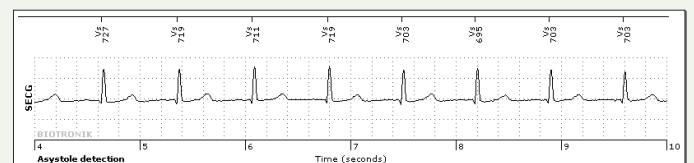
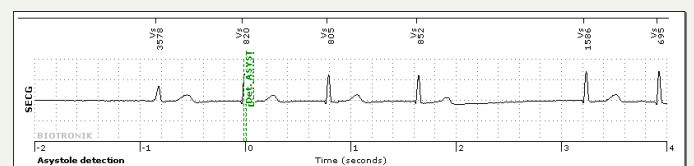
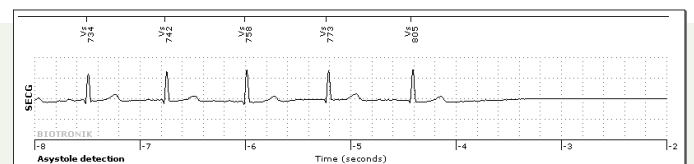
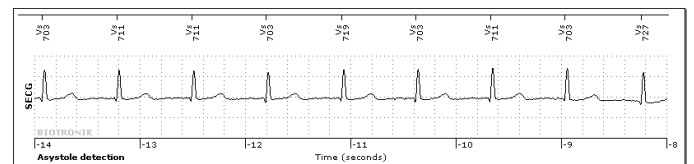
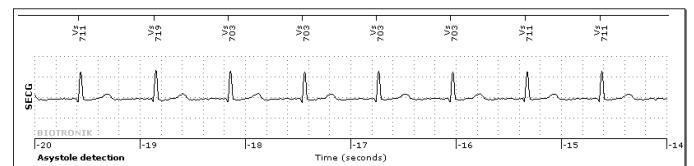
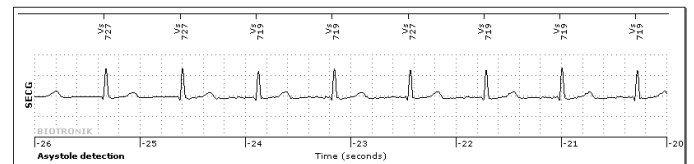
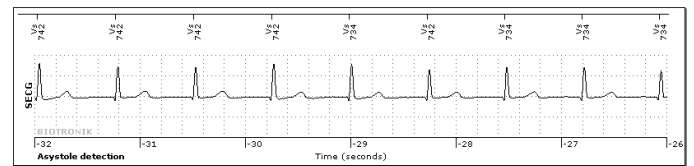
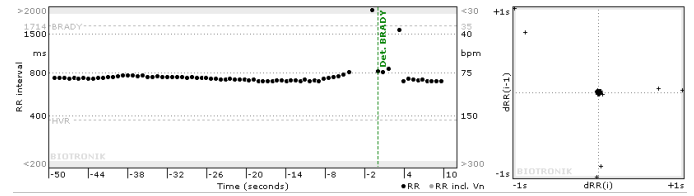
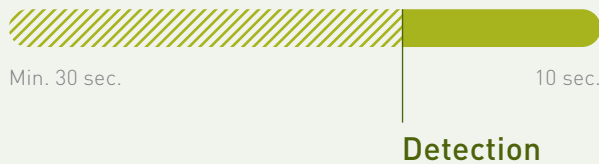
Patients with less than one week data were excluded

Weeks after injection

Syncope Detection

An automatically detected arrhythmia episode includes at least 30 seconds prior and 10 seconds after detection.

Stored arrhythmia episode

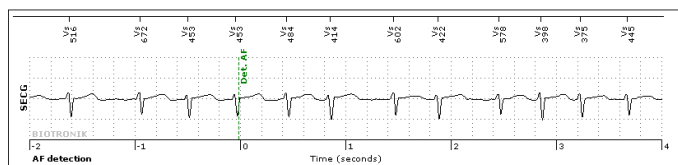
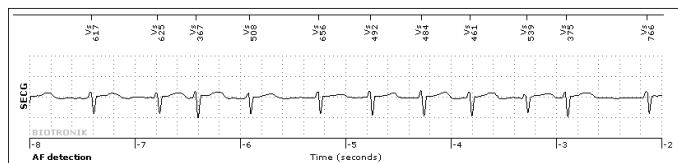
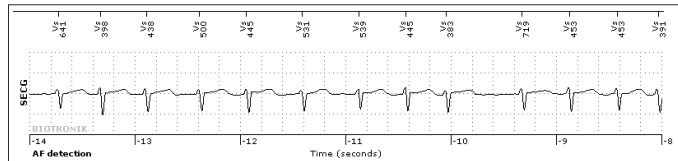
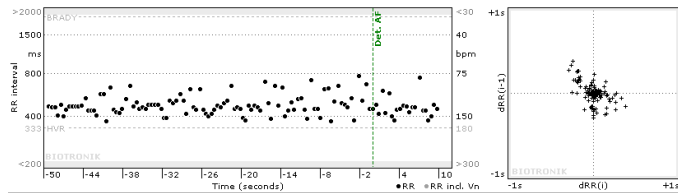


Example of asystole detection (BIO|CONCEPT_BIOMONIOR III study)

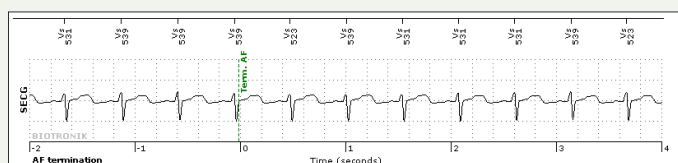
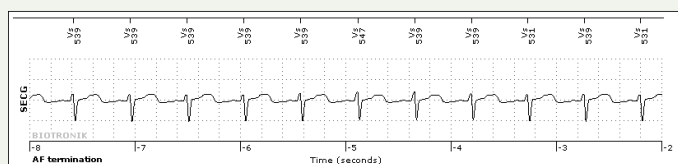
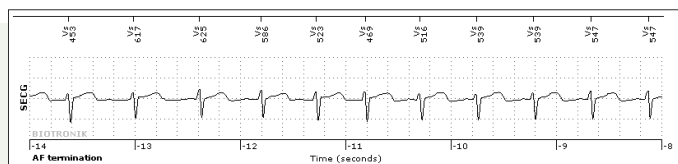
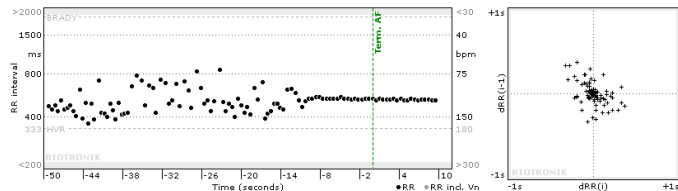
89% of The Heart Cycles Showed P-Waves¹

Visible P-waves support quick evaluation of cardiac rhythm.

AF detection



AF termination



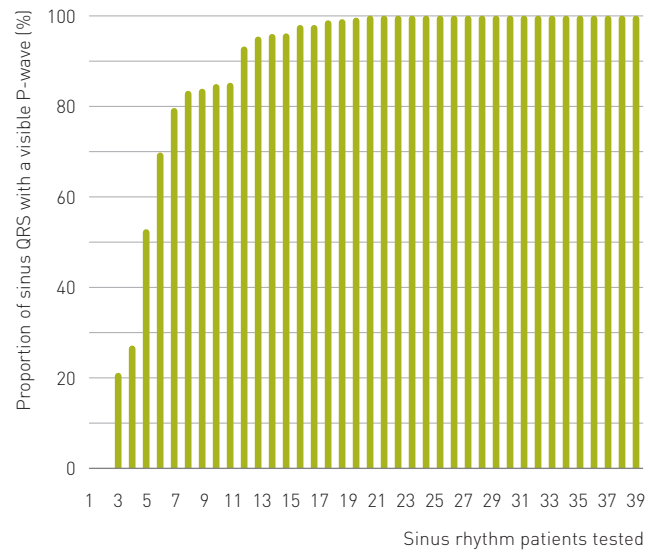
Example of AF detection (BIO|CONCEPT_BIOMONIOR III study)

Visible P-waves support quick evaluation of cardiac rhythm



Visible P-waves at sinus rhythm

Clearly visible P-waves in the vast majority of patients³



AF Detection

Each AF detection includes two separate episodes.

- AF onset
- AF termination

1. Mariani JA et al. J Electrocardiol. 2020, 60.



Simple Setup. Easy Optimization. Intuitive and Efficient.

Programming and Sensing in One Click



One-step programming with ProgramConsult

Predefined indication-based settings make programming quick and easy.

Program sets

Syncope
Palpitations
AF monitoring
Cryptogenic stroke



Syncope settings

Asystole duration (s)	3
SRD rate decrease	50
SRD sensitivity	low
Bradycardia zone limit	35
Bradycardia duration	20
HVR limit	160
HVR counter	16
AF sensitivity	low
RR variability limit	12
Confirmation time	10
Bigeminy rejection	agressive

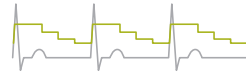
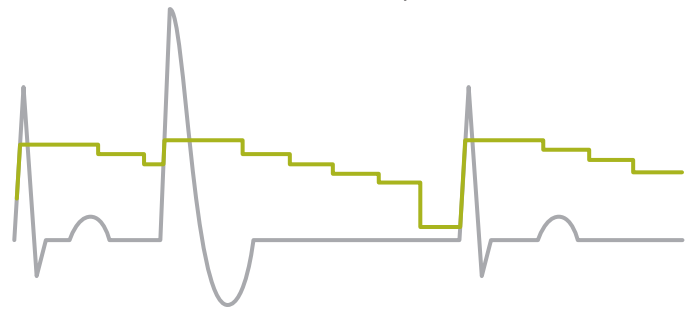


Quick sensing optimization with SensingConsult

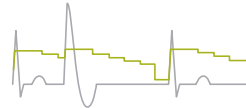
With one click, the optimal sensing threshold profile can be selected for the clinically most relevant scenarios.

Sensing threshold profile

● Threshold profile
● Rhythm



Standard



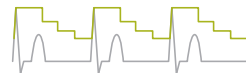
Sense after large PVCs



Sense small PVCs



Sense short intervals



T-wave suppression



Long-Term Monitoring Made Easy



5.5 years of continuous monitoring

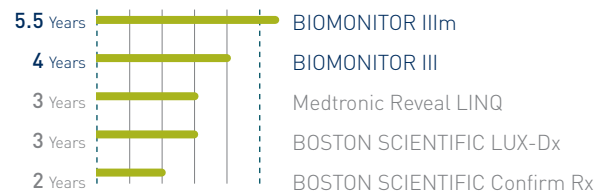
Industry-leading ICM longevity with daily Home Monitoring.



MR conditional approved

BIOMONITOR III is approved for 1.5 T and 3.0 T MRI scanning procedures.

ICM Longevities





Patient-Centered Monitoring Experience. No Setup Required.

No Patient Interaction Required

BIOMONITOR III works with BIOTRONIK's fully automated Home Monitoring. Just plug the CardioMessenger Smart into a power outlet and it is up and running.

- Auto setup and pairing
- Automatic daily data transmission



No need for in-office visits to have alerts changed



Daily data transmission success of 98%¹



Faster detection, up to 6 recorded episodes per day

BIOTRONIK Patient App:

For patients who want to be more involved in their therapy management

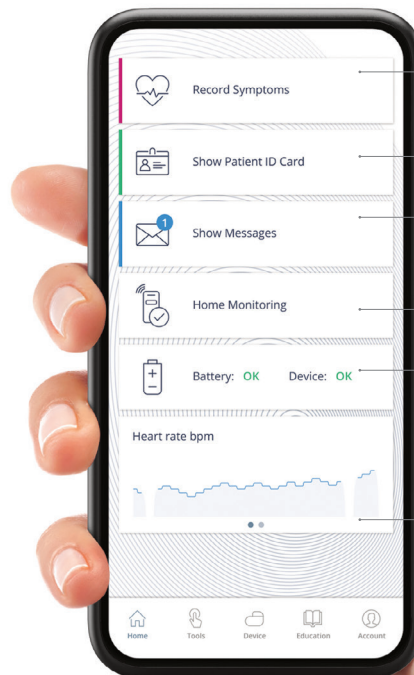
Adding symptoms to the monitoring diagnostics

Recorded patient symptoms are transmitted to Home Monitoring.

Enhanced patient compliance

Transmission feedback and help functions ensure successful long-term monitoring.

Subject to availability by region and as prescribed by a healthcare professional.



To record symptoms in the patient's symptom diary

Quick access to Patient ID

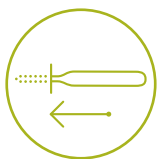
Verification at a glance if there is a contact request from the doctor

Last Home Monitoring transmission status

Battery and Device Status provides information about the current condition of the cardiac monitor.

Vital data provides information about the heart rate.

¹ Mariani JA et al. J Electrocardiol. 2020, 60..

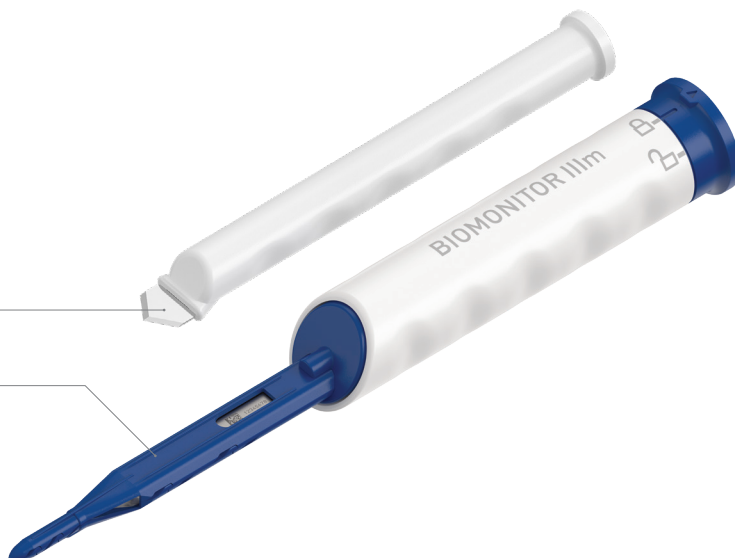


One-Step Injection. Ideal for In-Office.

Injection Procedure in Seconds¹

Dedicated blade for optimal
incision

BIOMONITOR III is preloaded
in the injection tool



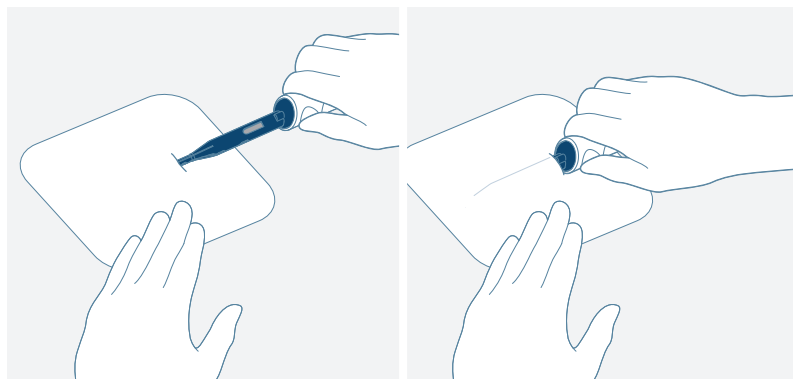
One-Step Injection Procedure

- Ready to inject: No assembly required
- Simple procedure: Inject. Unlock. Withdraw.
- Several closure options possible

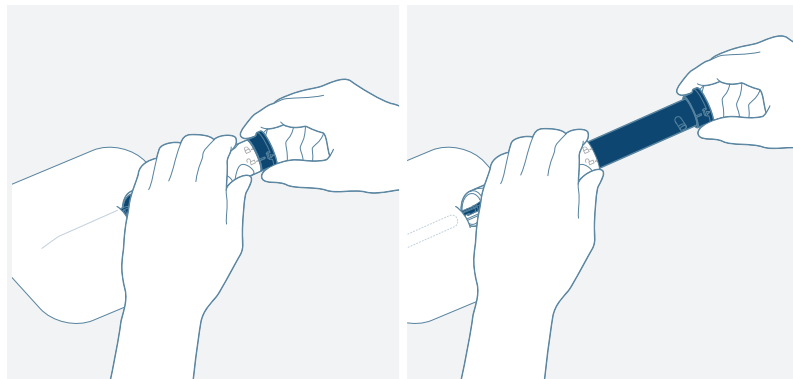
“BIOMONITOR III
expands the existing
diagnostic utility of
these devices while
simplifying the
procedure.

Dr. Raul Weiss
Ohio State University Heart and Vascular

Push to inject the BIOMONITOR III



Rotate and pull to remove the injection tool



¹ BIO|CONCEPT.BIOMONITOR III study. Data on file.