BIOMONITOR III
Injectable cardiac monitor

ProMRI

1,2,3,4,5,6,7,8,9,10,11 techninės charakteristikos

Ordering Information

Model	Order number
BIOMONITOR III	436066
Remote Assistant III	435292

Product Highlights

One-step injection procedure

BIOvector for reliable arrhythmia detection

High quality signal, easy rhythm classification

Excellent ECG display due to lossless signal compression

Additional clinically relevant information due to AF-ECG episodes with details regarding onset and termination

Intelligent memory management

ProgramConsult

BIOTRONIK Home Monitoring®

4 years of longevity

ProMRI
Full-body MR scan with 1.5 T & 3.0 T

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BIOMONITOR III

Technical Data

Sensing parameters
ECG quality	8 bit – 128 Hz bandwidth
R-wave sensing	Detection based on 1-vector ECG signal

Detection settings

Atrial fibrillation - Detection
Atrial fibrillation (AF)	OFF; ON
AF sensitivity	Low; Medium; High; Individual
Detection/termination window size	8/16; 16/24; 24/32
Detection intervals	5 … (2) … 23
Number of detection windows	1 … (1) … 4
Termination intervals	1 … (2) … 7
Number of termination windows	1 … (1) … 4
RR variability limit	6 … (3) … 18%
Confirmation time	1 … (1) … 6; 10 … (10) … 30 min
Bigeminy rejection	OFF; Standard; Aggressive

High ventricular rate - Detection
High ventricular rate (HVR)	OFF; ON
HVR limit	100 … (10) … 200 bpm
HVR counter	8 … (4) … 24; 32; 48 cycles

Bradycardia - Detection
Bradycardia	OFF; ON
Brady zone limit	30 … (5) … 80 bpm
Brady duration	5 … (5) … 30 s

Sudden rate drop - Detection
Sudden rate drop (SRD)	OFF; ON
SRD rate decrease	20 … (10) … 70%
SRD sensitivity	Low; Medium; High; Individual
Baseline intervals	48; 64; 128; 256
Rate-drop intervals	8; 16; 32

Asystole detection
Asystole	OFF; ON
Asystole duration	2 … (1) … 10 s
Patient trigger	OFF; ON

Indication-based programs
ProgramConsult	Syncope; Palpitations; AF monitoring; Cryptogenic stroke

Sensing settings
SensingConsult	Standard; Sense after large PVCs; Sense small PVCs; Sense short intervals; T-wave suppression
Sensing filter	4.5; 10; 18; 24 Hz
(SECG) Display	Normal; Inverted
(SECG) Signal filter	0.05; 0.5 Hz

Resting rate period
Start resting period	00:00 … (01:00) … 23:00 hh:mm
Resting period duration	1 … (1) … 12 h

Storage parameters
Total storage capacity	At least 60 min
Number and duration of episodes	60 episodes (56 automatically triggered, 4 patient-triggered)
Automatically triggered ECGs	56 episodes, at least 40 s each (at least 30 s before and 10 s after the event trigger)
Patient-triggered ECGs	4 episodes, at least 7.5 min each (7 min before and 30 s after the event trigger)

Intelligent memory management
Patient-triggered episodes	4 overwrite-protected: 4 most recent
HVR episodes	3 overwrite-protected: oldest, most recent, longest
Bradycardia episodes	3 overwrite-protected: oldest, most recent, longest
SRD episodes	3 overwrite-protected: oldest, 2 most recent
Asystole episodes	3 overwrite-protected: oldest, 2 most recent
AF episodes	3 overwrite-protected: oldest, most recent, longest

Diagnostics
Event messages and counters	Atrial fibrillation (AF)
	High ventricular rate (HVR)
	Bradycardia
	Sudden rate drop (SRD)
	Asystole
	Patient trigger
AF details	Longest AF episode
	AF burden
	AF trend
	AF time of occurrence
	AF duration
	Ventricular rate during AF
Activity	Activity trend
	Mean and resting rate trends
	Heart rate variability
	Rate histogram
Sensing	R-wave trend
	Noise duration trend

Housing
Sensing vector length	70 mm
Dimensions (WxHxL) (overall)	77.5 mm x 8.6 mm x 4.6 mm
Dimensions (WxHxL) (housing)	47.5 mm x 8.3 mm x 4.3 mm
Weight	4 g
Volume (overall)	1.9 cm³
Volume (housing)	1.7 cm³
X-ray identification	
Electrode coating	Fractal iridium coating

Service time
Average service time	4 years[1]
Battery charge	Display 0 – 100%

1) 6-month storage period
Home Monitoring: ON; sensing: 60 bpm; daily device message via Home Monitoring including one automatic subcutaneous ECG per day and 2 patient-triggered subcutaneous ECGs per month

MR conditional
ProMRI	Please refer to the technical manual "ProMRI MR conditional device systems" for detailed information
Without scan exclusion zone and post-operative waiting period	1.5 T and 3.0 T

Tools
FIT OneStep injection tool	201 mm x 24 mm (Ø handle)
Incision tool	130 mm x 13 mm (Ø handle)

Remote Assistant III
Dimensions (WxHxL)	96 mm x 58 mm x 20 mm
Weight	85 g
Battery type	2 x LR1, alkaline-manganese battery; Inaccessible to the user; Not replaceable

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Programmer settings
Home Monitoring	OFF; ON
Time of transmission	STD; 00:00 … (00:30) … 23:30 hh:mm

Home Monitoring Service Center settings
Periodic subcutaneous ECG for Home Monitoring-supported follow-up	OFF; daily, 7 … (1) … 366 days

Transmitted data
Clinical and technical data	Battery status, programmable parameters, diagnostic data and patient data, recorded subcutaneous ECGs
ECG	Up to 6 per day

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