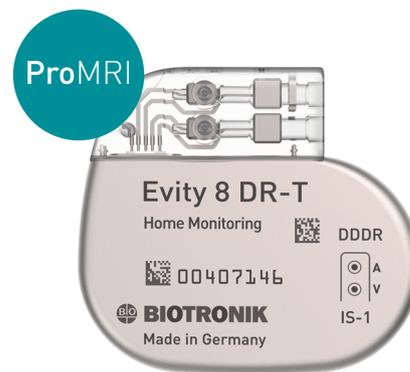


# Evity 8 DR-T

## MR conditional dual-chamber pacemaker



## Ordering Information

Model	Connectors	Volume/weight	Dimensions	Order number
Evity 8 DR-T	IS-1 (2x)	11 cm <sup>3</sup> /23.2 g	48 mm × 44 mm × 6.5 mm	407146

## Product Highlights

### Small size

Improves the patients' comfort through a reduced device volume.

### BIOTRONIK Home Monitoring®

Effective remote monitoring of heart failure and system integrity based on automatic and wireless daily transmissions. Enables earlier intervention and Home Monitoring-supported follow-ups that are approved by the U.S. FDA and CE Notified Body.

### Event-triggered wireless IEGM transmissions within 24 hours

Enable prompt evaluations for fast and better informed therapy decisions.

### ProMRI

Allows patients to undergo MR scanning under specific conditions.

### MRI AutoDetect

Simplifies workflows through automatic detection of MRI environment and minimizes patients' time in MRI mode.

### Closed Loop Stimulation (CLS)

Unique physiological rate response modulation during episodes of physical and emotional stress.

### Capture Control (RA & RV)

Improves patient safety and extends device longevity by automatically adjusting the pacing amplitudes.

### Vp Suppression

Follows the natural rhythm and promotes the underlying intrinsic rhythm with on-demand ventricular pacing.

### EasyAV

Facilitates programming of optimal AV timing.

### SafeSync RF telemetry

RF telemetry for wandless, time-saving and reliable data transmission at implantation and follow-up.

# Evity 8 DR-T

## Technical Data

### MR conditional

ProMRI	For combination of MR conditional devices, please see the "ProMRI MR conditional device systems" manual
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### Closed Loop Stimulation

CLS mode	DDD-CLS; WI-CLS
Max. CLS rate	80 ... [10] ... 160 bpm
Expert options	
• CLS response	Very low; Low; Medium; High; Very high
• CLS resting rate control	OFF; +10 ... [10] ... +50 bpm
• Vp required	Yes; No

### Pacing parameters

NBG code	DDDR
Mode	DDD-CLS; WI-CLS; DDDR; WIR; AAIR; DDIR; A00; DDD; VI; AA; DDI; A00R; VDD; VVT; AAT; VDI; V00; VDDR; VDIR; V00R; DDD-ADI; DVI; D00; DDDR-ADIR; DVIR; D00R; DDT; OFF

### Basic rate/Night rate

• Basic rate	30 ... [5] ... 100 ... [10] ... 200 bpm
• Night rate	OFF; 30 ... [5] ... 100 ... [10] ... 200 bpm
• Hysteresis	OFF; -5 ... [-5] ... -25 ... [-20] ... -65 bpm
• Repetitive/Scan cycles	OFF; ON (if Hysteresis was selected)
• Atrial overdrive	OFF; ON
Pulse amplitude [A/V]	0.2 ... [0.2] ... 6.0 ... [0.5] ... 7.5 V
Pulse width [A/V]	0.1 ... [0.1] ... 0.5 ... [0.25] ... 1.5 ms
Sensitivity atrium	AUTO; 0.1 ... [0.1] ... 1.5 ... [0.5] ... 7.5 mV
Sensitivity ventricle	AUTO; 0.5 ... [0.5] ... 7.5 mV

### Pacing algorithm

Atrial capture control	OFF; ON; ATM
• Min. amplitude	0.5 ... [0.1] ... 4.8 V
• Threshold test start	2.4 ... [0.6] ... 4.8 V
• Safety margin	0.5 ... [0.1] ... 1.2 V
• Search type	<ul style="list-style-type: none"> <li>Interval</li> <li>Time of day</li> </ul>
• Interval	0.1; 0.3; 1; 3; 6; 12; 24 h
• Time of day	00:00 ... [00:10] ... 23:50
Ventricular capture control	OFF; ON; ATM
• Threshold test start	2.4 ... [0.6] ... 4.8 V
• Safety margin	0.3 ... [0.1] ... 1.2 V
• Search type	<ul style="list-style-type: none"> <li>Interval</li> <li>Time of day</li> </ul>
• Interval	0.1; 0.3; 1; 3; 6; 12; 24 h
• Time of day	00:00 ... [00:10] ... 23:50
Vp suppression	OFF; ON (only in the modes DDDR-ADIR and DDD-ADI)
• Pacing suppression	1 ... [1] ... 8 consecutive Vs
• Pacing support	1 ... [1] ... 4 out of 8 cycles
Mode switching with X/Z-out-of-8 criterion	OFF; ON
• Intervention rate	100 ... [10] ... 250 bpm
• Onset criterion	3 ... [1] ... 8 out of 8
• Resolution criterion	3 ... [1] ... 8 out of 8
• Change of basic rate	OFF; +5 ... [5] ... +30 bpm
• Rate stabilization during mode switching	OFF; ON
• 2:1 Lock-in protection	OFF; ON
Atr. NIPS	Burst pacing; Programmed stimulation

### Conventional rate adaptation

Sensor	Accelerometer
• Max. activity rate	80 ... [10] ... 180 bpm
• Sensor gain	AUTO; Very low; Low; Medium; High; Very high
• Sensor threshold	Very low; Low; Medium; High; Very high
• Rate fading	OFF; ON
• Rate increase	1; 2; 4; 8 bpm/cycle
• Rate decrease	0.1; 0.2; 0.5; 1.0 bpm/cycle
Sensor optimization	Original, preview

### Timing intervals

AV delay	20 ... [5] ... 350 ms at 60 to 120 bpm; 20 ... [5] ... 300 ms at 140 bpm
AV dynamics	Low; Medium; High; Fixed
Sense compensation	OFF; -10 ... [-5] ... -120 ms
AV hysteresis mode	OFF; Negative; Positive; IRSplus
AV hysteresis (positive)	70; 110; 150; 200 ms
AV hysteresis (negative)	10 ... [10] ... 150 ms
AV repetitive/scan cycles	If AV hysteresis mode = Positive: OFF; ON
Upper rate response	
• Ventricle	90 ... [10] ... 200 bpm
• Atrium	OFF; 175; 200; 240 bpm
Tachycardia behavior	2:1; WKB
Refractory period/Blanking	
• Refract. period (atrium)	AUTO
• Refract. period (ventricle)	200 ... [25] ... 500 ms
• Auto PVARP	OFF; ON
• PVARP	175 ... [25] ... 600 ms
• PVARP after PVC	PVARP + 150 ms (max. 600 ms), automatically adjusted
• Ven. blanking after Ap	30 ... [5] ... 70 ms
• Far-field protection after Vs	100 ... [10] ... 220 ms
• Far-field protection after Vp	100 ... [10] ... 220 ms
• PMT protection	OFF; ON
• VA criterion	250 ... [25] ... 500 ms

### Leads

Automatic lead check [A/V]	ON; OFF
Lead configuration [A/V]	Unipolar; bipolar
Auto-initialization	ON

### Physical parameters

Service time	11 years, 4 months <sup>1)</sup>
Replacement indication	Programmed rate minus 11% (in DDD[R])
Electrically conductive surface	30 cm <sup>2</sup>
X-ray identification	BIOTRONIK logo

<sup>1)</sup> at A/V: 2.5 V/0.4 ms, 60 bpm, 500 Ω; pacing: 50 %, Home Monitoring: OFF, SafeSync: OFF

### Additional parameters

Magnet response	AUTO (10 cycles at 90 bpm asynchronous; then basic rate synchronous); asynchronous, synchronous
IEGM recording	20 recordings, max. 10 seconds each
Recording prior to event	0; 25; 50; 75; 100%
MRI program	OFF; ON; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

## BIOTRONIK Home Monitoring®

Transmitted data	Threshold [A/V], Sensing amplitude [A/V], Pacing statistics, Arrhythmia statistics [A/V], Heart Failure Monitor diagnostics, Battery status, Lead measurement values, Program parameters
Event based IEGM	AF; HVF; Lead failure
<b>Message types</b>	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer
<b>Findings</b>	
Device	Battery status; Programmer-triggered message received
Leads	Pacing impedance [A/V], Lead check [A/V], Sensing amplitude [A/V], Threshold [A/V], Capture control status [A/V]
Bradycardia	Ven. pacing (percent)
Arrhythmias	Number/duration of atrial arrhythmias; Number/duration of mode switching; Long ongoing atrial episode detected; Number/duration of ven. arrhythmias
Heart Failure Monitor	Mean heart rate; Atrial burden; Mean PVC/h
<b>Programmer settings</b>	
Home Monitoring	OFF; ON
Time of transmission	AUTO; 00:00 ... [01:00] ... 23:00 hh:mm
High atrial rate	OFF; ModeSw; AT
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h
High ventricular rate	OFF; ON
Event based IEGM	OFF; ON