

OTICON | Zircon

Technical data sheet

miniRITE R

60 85 100 105



	Zircon 1	Zircon 2	
Speech Understanding	OpenSound Navigator™	•	-
	- Balancing power effect	40%	-
	- Max. noise removal difficult/simple	6 dB / 0 dB	-
	Multiband Adaptive Directionality	-	•
	Noise Reduction	-	•
	Speech Guard™	•	-
	Single Compression	-	•
Sound Quality	Frequency lowering	Speech Rescue™	Speech Rescue™
	Fitting Bandwidth*	8 kHz	8 kHz
	Bass Boost (streaming)	•	•
Listening Comfort	Processing Channels	48	48
	Feedback Management	SuperShield & Feedback shield	SuperShield & Feedback shield
	Transient Noise Management	On/Off	-
Personalizing & Optimizing Fitting	Wind Noise Management	•	•
	Fitting Bands	14	12
	Multiple Directionality options	•	•
	Adaptation Management	•	•
	Oticon Firmware Updater	•	•
Connecting to the world	Fitting Formulas	NAL-NL1/NAL-NL2, DSL 5.0	NAL-NL1/NAL-NL2, DSL 5.0
	Hands-free communication**	•	•
	Direct streaming***	•	•
	Oticon ON app & Oticon RemoteCare app	•	•
	ConnectClip	•	•
	EduMic	•	•
	Remote Control 3.0	•	•
	TV Adapter 3.0	•	•
	Phone Adapter 2.0	•	•
	Tinnitus SoundSupport™	•	•
CROS/BICROS support	•	•	

*Bandwidth accessible for gain adjustments during fitting

**Available for Oticon Zircon from FW 1.1 with select iPhone models

***From iPhone®, iPad®, iPod touch®, and select Android™ devices

Operating and charging conditions

Temperature: +5°C to +40°C (41°F to 104°F)
Relative humidity: 5% to 93%, non-condensing
Atmospheric pressure: 700 hPa to 1060 hPa

Storage and transportation conditions

Temperature and humidity should not exceed the below limits for extended periods during transportation and storage.

Transport

Temperature: -20°C to +60°C (-4°F to 140°F)
Relative humidity: 5% to 93%, non-condensing
Atmospheric pressure: 700 hPa to 1060 hPa

Storage

Temperature: -20°C to +30°C (-4°F to 86°F)
Relative humidity: 5% to 93%, non-condensing
Atmospheric pressure: 700 hPa to 1060 hPa

Apple, the Apple logo, iPhone, iPad, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

Oticon Zircon miniRITE R offers a discreet design powered by a rechargeable lithium-ion battery. The style features telecoil, and a double push-button. It is a Made for iPhone® hearing aid and compatible with the new Android protocol for Audio Streaming for Hearing Aids (ASHA) - making it possible to stream directly from iPhone, iPad®, iPod touch® and select Android™ devices.

OpenSound Navigator™ provides access to speech in 360° making the listener more easily aware of what is going on in the surroundings.

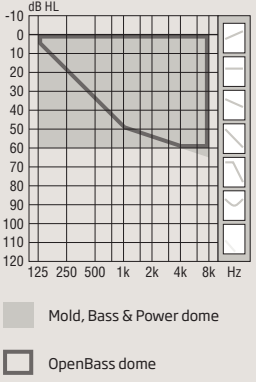
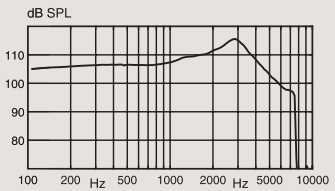
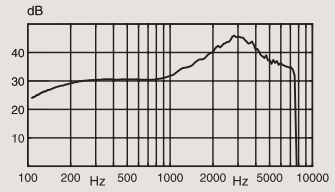
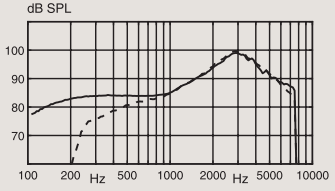
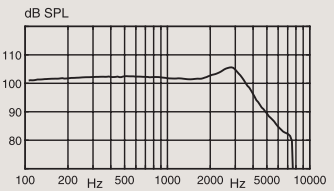
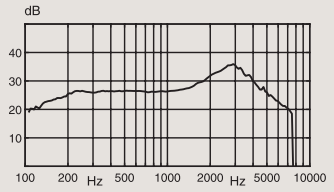
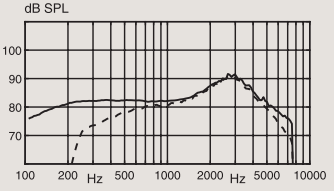
Speech Guard™ provides more natural and clear speech sounds making the details in speech stand out more.

The Polaris™ platform provides a tremendous speed and memory capacity for audiological processing and connectivity options. New features can be added and updates performed wirelessly.



For information on compatibility, please visit www.oticon.com/support/compatibility



		Ear Simulator Measured according to IEC 60118-0:1983/AMD1:1994, IEC 60118-0:2015, IEC 60118-1:1995+AMD1:1998 CSV and IEC 60318-4:2010	2CC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006	
 <p>60</p> <p>Mold, Bass & Power dome</p> <p>OpenBass dome</p> <p>Technical information Omnidirectional mode is used unless otherwise stated.</p> <p>— Acoustic input: 60 dB SPL - - - Magnetic input: 31.6 mA/m</p>		<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p> 	<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p> 	
	OSPL90	Peak 1600 Hz HFA-OSPL90	116 dB SPL 110 dB SPL 110 dB SPL	106 dB SPL 102 dB SPL 103 dB SPL
	Full-on gain ¹	Peak 1600 Hz HFA-FOG	46 dB 37 dB 38 dB	36 dB 29 dB 30 dB
	Reference test gain		31 dB	26 dB
Frequency range		100-7500 Hz	100-7500 Hz	
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	68 dB SPL 88 dB SPL -	- - 83/83 dB SPL	
Total harmonic distortion (Input 70 dB SPL)	500 Hz 800 Hz 1600 Hz	<2 % <3 % <2 %	<2 % <2 % <2 %	
Equivalent input noise level	Omni Dir	19 dB SPL 26 dB SPL	17 dB SPL 29 dB SPL	
Battery		Lithium-Ion	Lithium-Ion	
Expected operating time, hours ²		24		

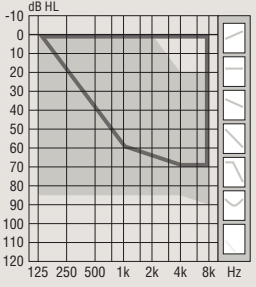

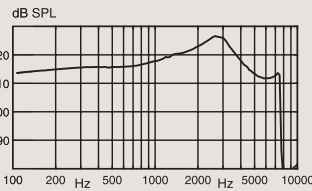
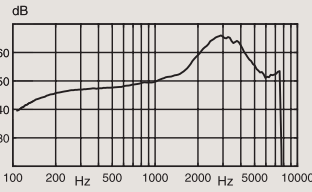
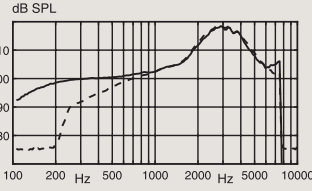
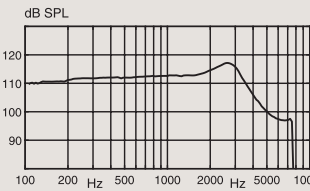
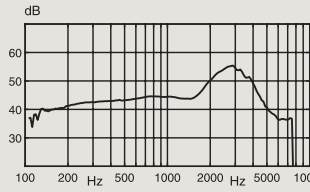
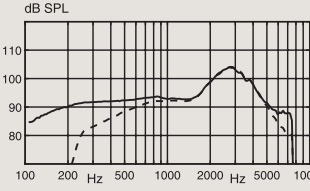
1) Measured with the gain control of the hearing aids set to their full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-0:1983+A1:1994 but without influence of feedback.

2) Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, sound environment, battery age and use of wireless accessories.

		Ear Simulator Measured according to IEC 60118-0:1983/AMD1:1994, IEC 60118-0:2015, IEC 60118-1:1995+AMD1:1998 CSV and IEC 60318-4:2010	2CC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
<p>60</p> <p>Mold, Bass & Power dome</p> <p>OpenBass dome</p> <p>Technical information Omnidirectional mode is used unless otherwise stated.</p>		OSPL90 	OSPL90
		Full-on gain 	Full-on gain
		Frequency response <p>— Acoustic input: 60 dB SPL - - - Magnetic input: 31.6 mA/m</p>	Frequency response
OSPL90	Peak 1600 Hz HFA-OSPL90	116 dB SPL 110 dB SPL 110 dB SPL	106 dB SPL 102 dB SPL 103 dB SPL
Full-on gain ¹	Peak 1600 Hz HFA-FOG	46 dB 37 dB 38 dB	36 dB 29 dB 30 dB
Reference test gain		31 dB	26 dB
Frequency range		100-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	68 dB SPL 88 dB SPL -	- - 83/83 dB SPL
Total harmonic distortion (Input 70 dB SPL)	500 Hz 800 Hz 1600 Hz	<2 % <3 % <2 %	<2 % <2 % <2 %
Equivalent input noise level	Omni Dir	19 dB SPL 26 dB SPL	17 dB SPL 29 dB SPL
Battery		Lithium-Ion	Lithium-Ion
Expected operating time, hours ²		24	

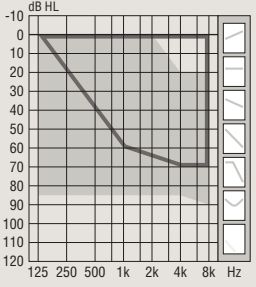

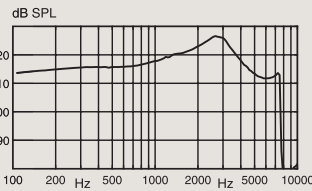
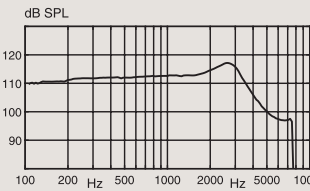
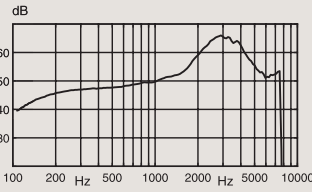
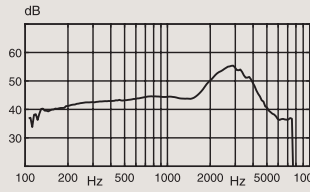
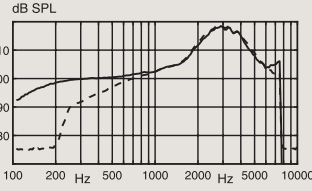
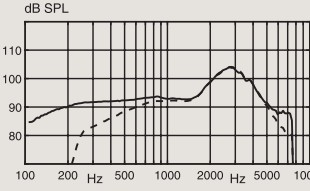
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 <p>85</p> <p>Mold, Bass & Power dome</p> <p>OpenBass dome</p> <p>Technical information Omnidirectional mode is used unless otherwise stated.</p>		<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p>  <p>— Acoustic input: 60 dB SPL - - - Magnetic input: 31.6 mA/m</p>	<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p> 
		OSPL90	Peak 1600 Hz HFA-OSPL90
Full-on gain ¹	Peak 1600 Hz HFA-FOG	66 dB 53 dB 56 dB	55 dB 45 dB 48 dB
Reference test gain		46 dB	37 dB
Frequency range		100-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	84 dB SPL 104 dB SPL -	- - 94/94 dB SPL
Total harmonic distortion (Input 70 dB SPL)	500 Hz 800 Hz 1600 Hz	<2 % <4 % <5 %	<2 % <2 % <2 %
Equivalent input noise level	Omni Dir	22 dB SPL 29 dB SPL	18 dB SPL 27 dB SPL
Battery		Lithium-Ion	Lithium-Ion
Expected operating time, hours ²		24	

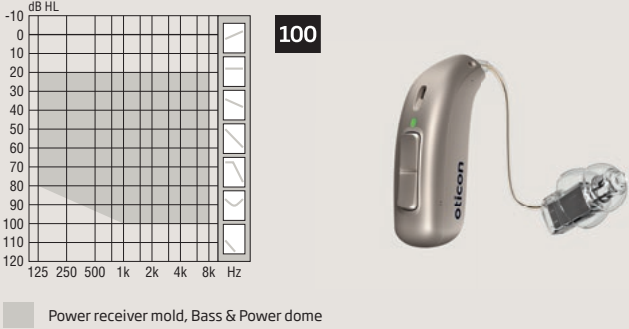
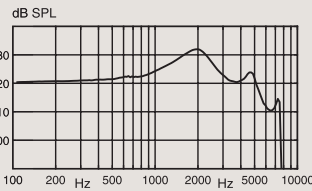
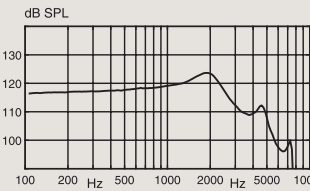
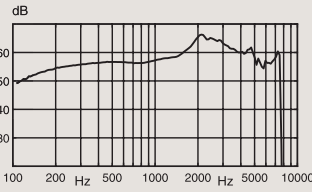
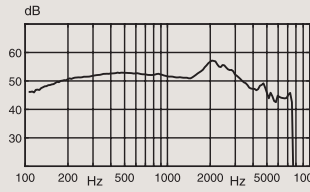
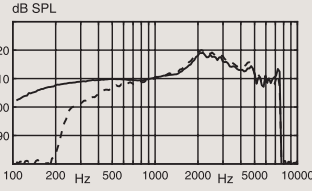
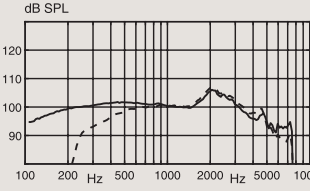
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 <p>85</p>  <p>— Mold, Bass & Power dome □ OpenBass dome</p> <p>Technical information Omnidirectional mode is used unless otherwise stated.</p>		<p>OSPL90</p>  <p>OSPL90</p> 	
		<p>Full-on gain</p>  <p>Full-on gain</p> 	
		<p>Frequency response</p>  <p>— Acoustic input: 60 dB SPL - - - Magnetic input: 31.6 mA/m</p> <p>Frequency response</p> 	
OSPL90	Peak 1600 Hz HFA-OSPL90	127 dB SPL 121 dB SPL 122 dB SPL	117 dB SPL 113 dB SPL 114 dB SPL
Full-on gain ¹	Peak 1600 Hz HFA-FOG	66 dB 53 dB 56 dB	55 dB 45 dB 48 dB
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Total harmonic distortion (Input 70 dB SPL)	500 Hz 800 Hz 1600 Hz	<2 % <4 % <5 %	<2 % <2 % <2 %
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Battery		Lithium-Ion	Lithium-Ion
Expected operating time, hours ²		24	

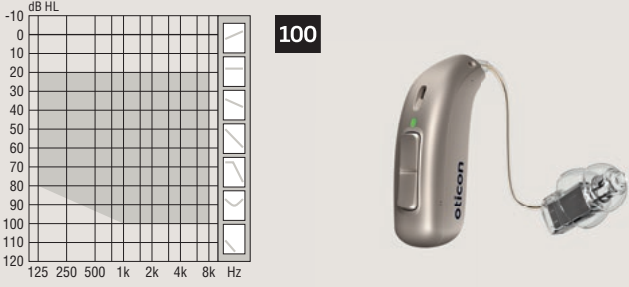
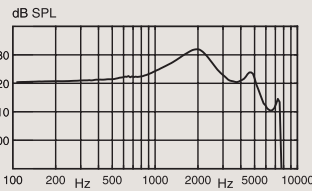
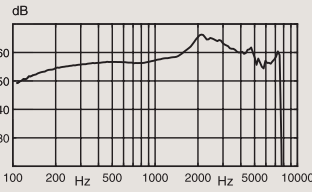
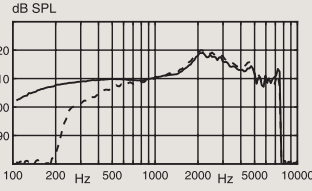
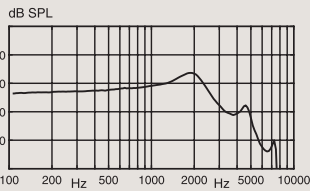
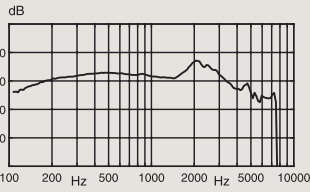
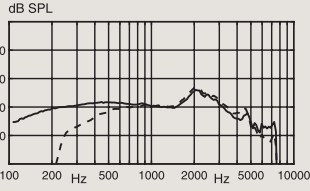
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 <p>100</p> <p>Power receiver mold, Bass & Power dome</p>	OSPL90 dB SPL 	OSPL90 dB SPL 	
	Full-on gain dB 	Full-on gain dB 	
Technical information Omnidirectional mode is used unless otherwise stated.	Frequency response dB SPL 	Frequency response dB SPL 	
Warning to the hearing aid dispenser The maximum output capability of the hearing aid may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the hearing aid, as there may be risk of impairing the remaining hearing of the hearing aid user.	— Acoustic input: 60 dB SPL - - - Magnetic input: 31.6 mA/m		
OSPL90	Peak 1600 Hz HFA-OSPL90	132 dB SPL 130 dB SPL 127 dB SPL	124 dB SPL 122 dB SPL 120 dB SPL
Full-on gain ¹	Peak 1600 Hz HFA-FOG	66 dB 60 dB 61 dB	57 dB 52 dB 53 dB
Reference test gain		53 dB	42 dB
Frequency range		100-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	91 dB SPL 111 dB SPL -	- - 100/100 dB SPL
Total harmonic distortion (Input 70 dB SPL)	500 Hz 800 Hz 1600 Hz	<9 % <6 % <3 %	<2 % <2 % <2 %
Equivalent input noise level	Omni Dir	17 dB SPL 26 dB SPL	17 dB SPL 29 dB SPL
Battery		Lithium-Ion	Lithium-Ion
Expected operating time, hours ²		24	


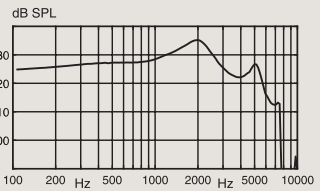
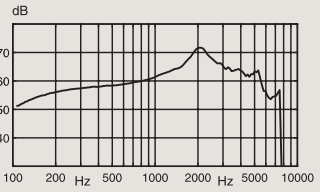
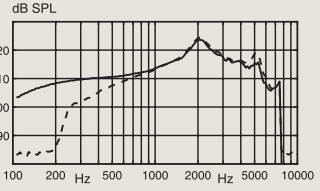
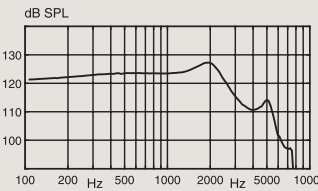
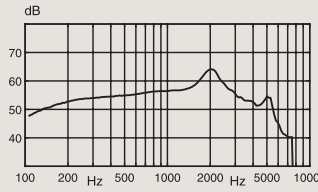
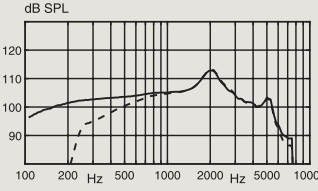
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 <p>100</p> <p>Power receiver mold, Bass & Power dome</p>		<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p> 	<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p> 
	<p>— Acoustic input: 60 dB SPL</p> <p>- - - Magnetic input: 31.6 mA/m</p>		
OSPL90	Peak	132 dB SPL	124 dB SPL
	1600 Hz	130 dB SPL	122 dB SPL
	HFA-OSPL90	127 dB SPL	120 dB SPL
Full-on gain ¹	Peak	66 dB	57 dB
	1600 Hz	60 dB	52 dB
	HFA-FOG	61 dB	53 dB
Reference test gain		53 dB	42 dB
Frequency range		100-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field	91 dB SPL	-
	10 mA/m field	111 dB SPL	-
	SPLITS L/R	-	100/100 dB SPL
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<9 %	<2 %
	800 Hz	<6 %	<2 %
	1600 Hz	<3 %	<2 %
Equivalent input noise level	Omni	17 dB SPL	17 dB SPL
	Dir	26 dB SPL	29 dB SPL
Battery		Lithium-Ion	Lithium-Ion
Expected operating time, hours ²		24	


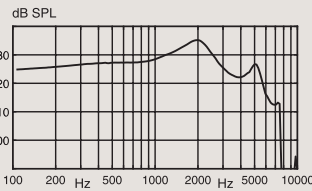
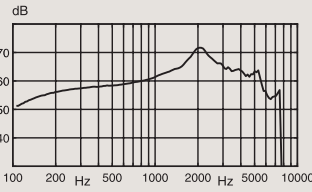
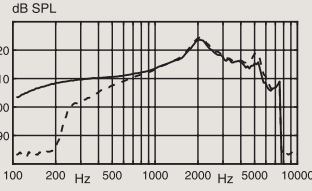
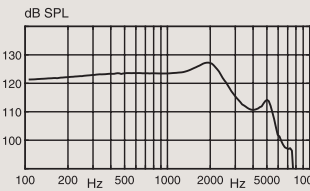
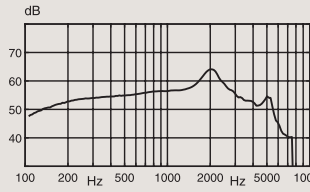
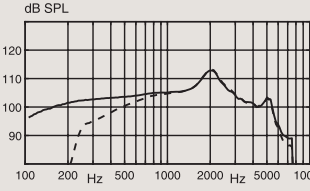
1) Measured with the gain control of the hearing aids set to their full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-0:1983+A1:1994 but without influence of feedback.

2) Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, sound environment, battery age and use of wireless accessories.

		Ear Simulator Measured according to IEC 60118-0:1983/AMD1:1994, IEC 60118-0:2015, IEC 60118-1:1995+AMD1:1998 CSV and IEC 60318-4:2010	2CC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
 <p>105</p> <p>Power receiver mold</p> <p>Technical information Omnidirectional mode is used unless otherwise stated.</p> <p>Warning to the hearing aid dispenser The maximum output capability of the hearing aid may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the hearing aid, as there may be risk of impairing the remaining hearing of the hearing aid user.</p> <p>— Acoustic input: 60 dB SPL - - - Magnetic input: 31.6 mA/m</p>		<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p> 	<p>OSPL90</p>  <p>Full-on gain</p>  <p>Frequency response</p> 
OSPL90	Peak	135 dB SPL	127 dB SPL
	1600 Hz	133 dB SPL	126 dB SPL
	HFA-OSPL90	131 dB SPL	123 dB SPL
Full-on gain ¹	Peak	72 dB	64 dB
	1600 Hz	66 dB	59 dB
	HFA-FOG	65 dB	58 dB
Reference test gain		58 dB	47 dB
Frequency range		100-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field	96 dB SPL	-
	10 mA/m field	116 dB SPL	-
	SPLITS L/R	-	104/104 dB SPL
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<2 %	<2 %
	800 Hz	<2 %	<2 %
	1600 Hz	<4 %	<2 %
Equivalent input noise level	Omni	16 dB SPL	16 dB SPL
	Dir	25 dB SPL	28 dB SPL
Battery		Lithium-Ion	Lithium-Ion
Expected operating time, hours ²		24	

1) Measured with the gain control of the hearing aids set to their full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-0:1983+A1:1994 but without influence of feedback.

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		<p>Peak 135 dB SPL</p> <p>1600 Hz 133 dB SPL</p> <p>HFA-OSPL90 131 dB SPL</p>	<p>Peak 127 dB SPL</p> <p>1600 Hz 126 dB SPL</p> <p>HFA-OSPL90 123 dB SPL</p>
	<p>Peak 72 dB</p> <p>1600 Hz 66 dB</p> <p>HFA-FOG 65 dB</p>	<p>Peak 64 dB</p> <p>1600 Hz 59 dB</p> <p>HFA-FOG 58 dB</p>	
	Reference test gain 58 dB	Reference test gain 47 dB	
	Frequency range 100-7500 Hz	Frequency range 100-7500 Hz	
	1 mA/m field 96 dB SPL	-	
	10 mA/m field 116 dB SPL	-	
	SPLITS L/R -	104/104 dB SPL	
	500 Hz <2 %	<2 %	
	800 Hz <2 %	<2 %	
	1600 Hz <4 %	<2 %	
	Omni 16 dB SPL	16 dB SPL	
	Dir 25 dB SPL	28 dB SPL	
	Battery Lithium-Ion	Lithium-Ion	
	Expected operating time, hours ²	24	

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