

Technical data sheet

miniRITE

60 85 100 105



	Oticon Opn S 1	Oticon Opn S 2	Oticon Opn S 3
Speech Understanding	OpenSound Navigator™	Level 1	Level 2
	- Balancing power effect	100%	50%
	- Max. noise removal	9 dB	5 dB
	OpenSound Optimizer™	•	•
	Speech Guard™ LX	Level 1	Level 2
	Spatial Sound™ LX	4 estimators	2 estimators
	Soft Speech Booster LX	•	•
Sound Quality	Speech Rescue™ LX	•	•
	Clear Dynamics	•	-
	Spatial Noise Management	•	-
	Fitting Bandwidth*	10 KHz	8 KHz
	Processing Channels	64	48
Listening Comfort	Bass Boost (streaming)	•	•
	Transient Noise Management	4 configurations	On/Off
	Feedback shield LX	•	•
Personalization & Optimizing Fitting	Wind Noise Management	•	•
	YouMatic™ LX	3 configurations	2 configurations
	Fitting Bands	16	14
	Multiple Directionality Options	•	•
	Adaptation Management	•	•
	Oticon Firmware Updater	•	•
Connecting to the World	Fitting Formulas	VAC+, NAL-NL1 + 2, DSL v5.0	VAC+, NAL-NL1 + 2, DSL v5.0
	Stereo streaming (2.4 GHz)	•	•
	Oticon ON App	•	•
	ConnectClip	•	•
	Remote Control 3.0	•	•
	TV Adapter 3.0	•	•
	Phone Adapter 2.0	•	•
	Tinnitus SoundSupport™	•	•

* Bandwidth accessible for gain adjustments during fitting

Operating conditions

Temperature: +1°C to +40°C
Relative humidity: 5% to 93%, non-condensing

Storage and transportation conditions

Temperature and humidity should not exceed the following limits for extended periods during transportation and storage.
Temperature: -25°C to +60°C
Relative humidity: 5% to 93%, non-condensing

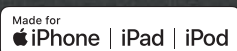
Oticon Opn S™ miniRITE offers discreet design with 312 battery and single push button.

OpenSound Navigator™ helps users to select and understand speech in all types of environments by balancing the sound sources and attenuating noise.

OpenSound Optimizer™ improves users listening experience and comfort by blocking feedback and securing the targeted amplification of sound sources.

TwinLink™ wireless technology combines binaural communication and 2.4 GHz connectivity with stereo streaming directly from digital devices.

Oticon Opn S is built on the powerful Velox S™ platform which has a programmable firmware architecture, supporting future performance updates.



IP68

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PEOPLE FIRST

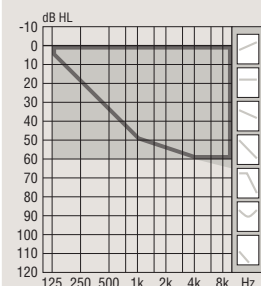
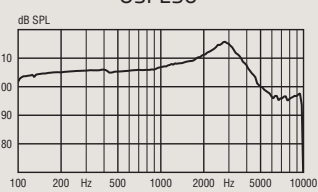
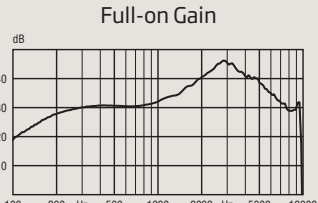
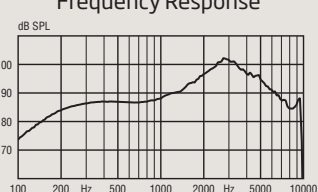
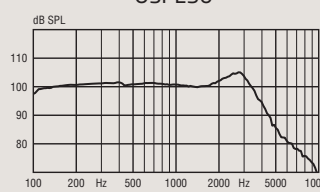
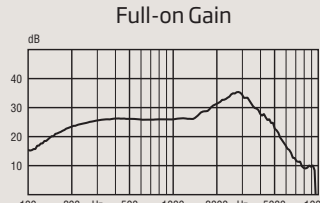
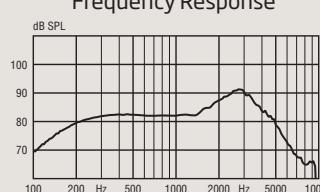
For information on compatibility, please visit www.oticon.com/support

Oticon Opn S 1

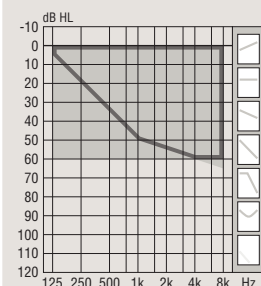
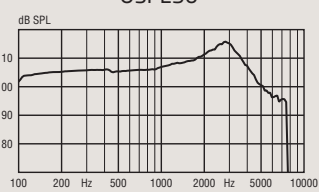
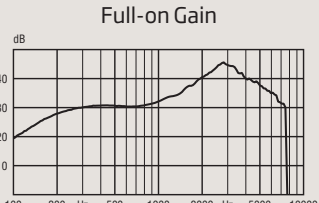
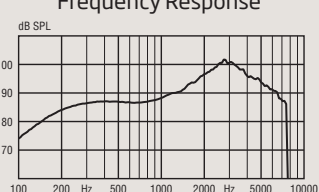
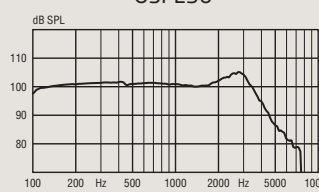
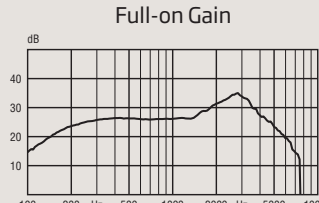
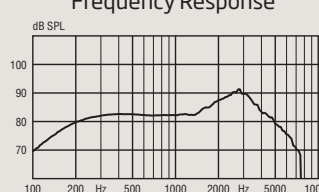
miniRITE 60

Oticon Opn S 2 & 3

miniRITE 60

Technical data		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	ZCC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
 		  	  
OSPL90	Peak 1600 Hz HFA-OSPL90	116 dB SPL 109 dB SPL 110 dB SPL	105 dB SPL 100 dB SPL 102 dB SPL
Full-on gain ¹	Peak 1600 Hz HFA-FOG	46 dB 37 dB 38 dB	35 dB 29 dB 30 dB
Reference test gain		30 dB	26 dB
Frequency range		110-9700 Hz	100-9200 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	- - -	- - -
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	21 dB SPL 28 dB SPL	18 dB SPL 27 dB SPL
Battery consumption ²	Typical Quiescent	1.5 mA 1.5 mA	1.6 mA 1.5 mA
Battery life, artificial measurement, hours ³		120	115
Expected battery life, hours (battery size 312 - IEC PR41) ⁴ IRIL (IEC 60118-13:2011)		60-65 800/1400/2000 MHz: 21/ <2/ <2 dB SPL	

1) Measured with the gain control of the hearing aid set to its 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+A1:1994 but without influence of feedback.
2) Battery current is measured according to IEC 60118-0:1983/AMD1:1994 §7.11, IEC 60118-0:2015 §7.7 and ANSI S3.22:2014 §6.13 after a settling time of minimum 3 minutes.
3) Based on the standardized battery consumption measurement (IEC 60118-0:1983/AMD1:1994). The actual battery life depends on battery quality, use pattern, active feature set, hearing loss and sound environment.
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels, incl. direct stereo streaming from a TV (25% of the time) and streaming from a mobile phone (6% of the time).

Technical data		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	ZCC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
 		  	  
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Full-on gain ¹	Peak 1600 Hz HFA-FOG	46 dB 37 dB 38 dB	35 dB 29 dB 30 dB
Reference test gain		30 dB	26 dB
Frequency range		110-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	- - -	- - -
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	22 dB SPL 30 dB SPL	19 dB SPL 28 dB SPL
Battery consumption ²	Typical Quiescent	1.5 mA 1.5 mA	1.6 mA 1.5 mA
Battery life, artificial measurement, hours ³		120	115
Expected battery life, hours (battery size 312 - IEC PR41) ⁴ IRIL (IEC 60118-13:2011)		60-65 800/1400/2000 MHz: 21/ <2/ <2 dB SPL	

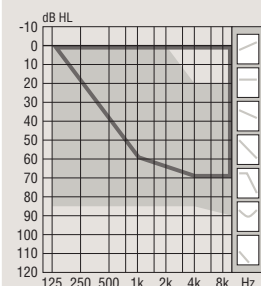
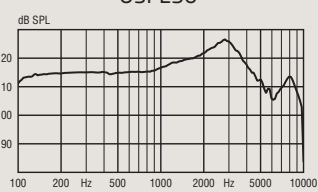
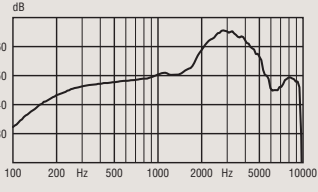
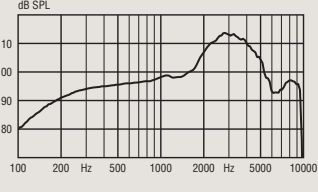
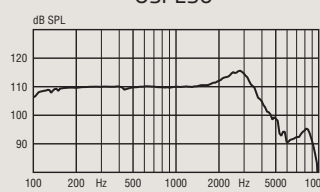
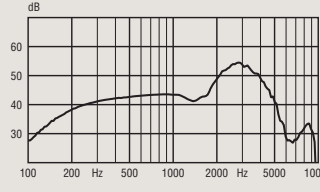
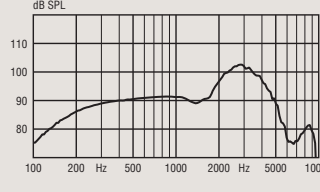
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Oticon Opn S 1

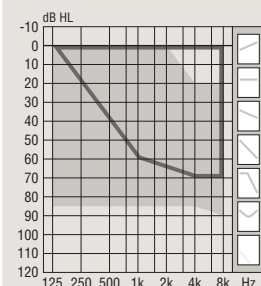
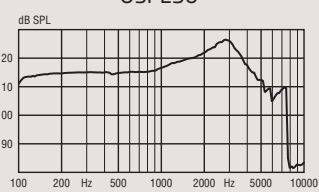
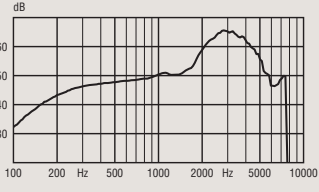
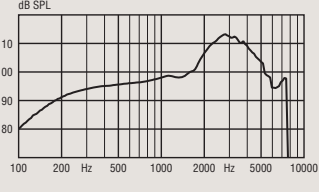
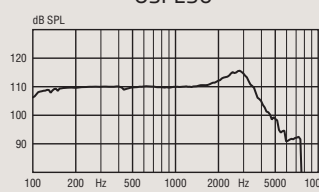
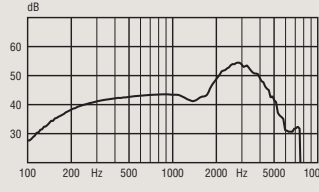
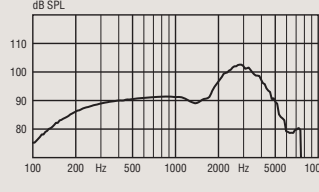
miniRITE 85

Oticon Opn S 2 & 3

miniRITE 85

Technical data		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	ZCC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
  85		  	  
OSPL90	Peak	127 dB SPL	116 dB SPL
	1600 Hz	120 dB SPL	111 dB SPL
	HFA-OSPL90	121 dB SPL	112 dB SPL
Full-on gain ¹	Peak	66 dB	54 dB
	1600 Hz	52 dB	43 dB
	HFA-FOG	55 dB	47 dB
Reference test gain		45 dB	34 dB
Frequency range		120-9500 Hz	100-8500 Hz
Telecoil output (1600 Hz)	1 mA/m field	-	-
	10 mA/m field	-	-
	SPLITS L/R	-	-
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<2 %	<2 %
	800 Hz	<3 %	<2 %
	1600 Hz	<2 %	<2 %
Equivalent input noise level	Omni	25 dB SPL	20 dB SPL
	Dir	32 dB SPL	29 dB SPL
Battery consumption ²	Typical	1.6 mA	1.7 mA
	Quiescent	1.5 mA	1.5 mA
Battery life, artificial measurement, hours ³		110	105
Expected battery life, hours (battery size 312 - IEC PR41) ⁴		55-65	
IRIL (IEC 60118-13:2011)		800/1400/2000 MHz: 31/<15/<15 dB SPL	

1) Measured with the gain control of the hearing aid set to its 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+A1:1994 but without influence of feedback.
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OSPL90	Peak	127 dB SPL	116 dB SPL
	1600 Hz	120 dB SPL	111 dB SPL
	HFA-OSPL90	121 dB SPL	112 dB SPL
Full-on gain ¹	Peak	66 dB	54 dB
	1600 Hz	52 dB	43 dB
	HFA-FOG	55 dB	47 dB
Reference test gain		45 dB	34 dB
Frequency range		120-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field	-	-
	10 mA/m field	-	-
	SPLITS L/R	-	-
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<2 %	<2 %
	800 Hz	<3 %	<2 %
	1600 Hz	<2 %	<2 %
Equivalent input noise level	Omni	26 dB SPL	21 dB SPL
	Dir	33 dB SPL	30 dB SPL
Battery consumption ²	Typical	1.6 mA	1.7 mA
	Quiescent	1.5 mA	1.5 mA
Battery life, artificial measurement, hours ³		110	105
Expected battery life, hours (battery size 312 - IEC PR41) ⁴		55-65	
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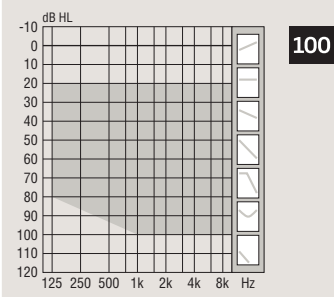
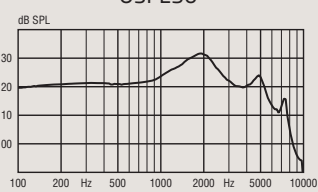
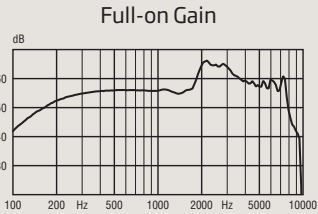
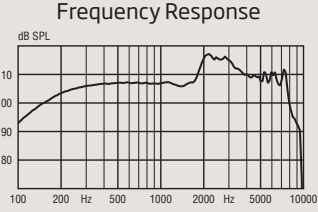
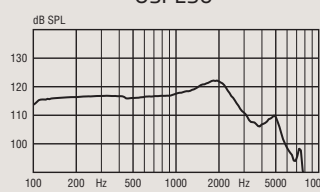
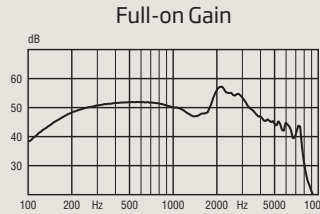
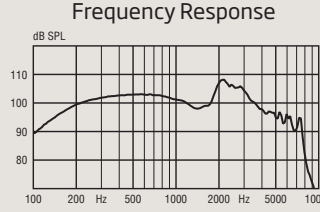
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Oticon Opn S 1

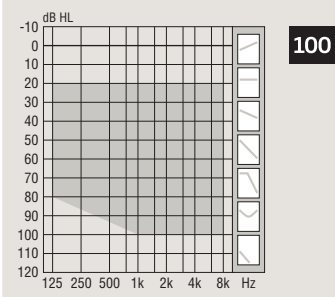
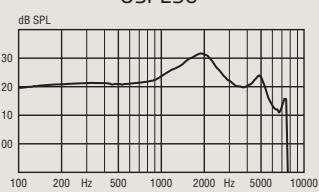
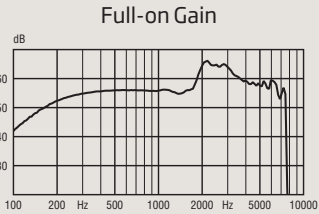
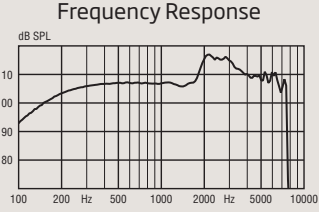
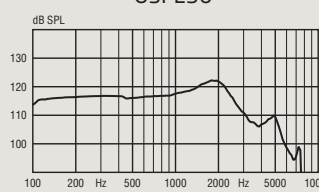
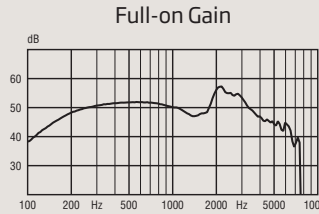
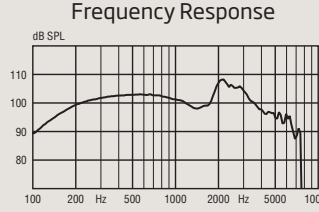
miniRITE 100

Oticon Opn S 2 & 3

miniRITE 100

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OSPL90	Peak	132 dB SPL	122 dB SPL
	1600 Hz	130 dB SPL	121 dB SPL
	HFA-OSPL90	127 dB SPL	118 dB SPL
Full-on gain ¹	Peak	66 dB	57 dB
	1600 Hz	56 dB	48 dB
	HFA-FOG	59 dB	51 dB
Reference test gain		49 dB	42 dB
Frequency range		100-8500 Hz	100-8000 Hz
Telecoil output (1600 Hz)	1 mA/m field	-	-
	10 mA/m field	-	-
	SPLITS L/R	-	-
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<7 %	<2 %
	800 Hz	<4 %	<2 %
	1600 Hz	<2 %	<2 %
Equivalent input noise level	Omni	23 dB SPL	19 dB SPL
	Dir	32 dB SPL	30 dB SPL
Battery consumption ²	Typical	1.5 mA	1.7 mA
	Quiescent	1.5 mA	1.5 mA
Battery life, artificial measurement, hours ³		115	105
Expected battery life, hours (battery size 312 - IEC PR41) ⁴		50-65	
IRIL (IEC 60118-13:2011)		800/1400/2000 MHz: 25/<20/<20 dB SPL	

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	10 mA/m field	-	-
	SPLITS L/R	-	-
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<7 %	<2 %
	800 Hz	<4 %	<2 %
	1600 Hz	<2 %	<2 %
Equivalent input noise level	Omni	23 dB SPL	19 dB SPL
	Dir	32 dB SPL	30 dB SPL
Battery consumption ²	Typical	1.5 mA	1.7 mA
	Quiescent	1.5 mA	1.5 mA
Battery life, artificial measurement, hours ³		115	105
Expected battery life, hours (battery size 312 - IEC PR41) ⁴		50-65	
IRIL (IEC 60118-13:2011)		800/1400/2000 MHz: 25/<20/<20 dB SPL	

1) Measured with the gain control of the hearing aid set to its 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+A1:1994 but without influence of feedback.
2) Battery current is measured according to IEC 60118-0:1983/AMD1:1994 §7.11, IEC 60118-0:2015 §7.7 and ANSI S3.22:2014 §6.13 after a settling time of minimum 3 minutes.
3) Based on the standardized battery consumption measurement (IEC 60118-0:1983/AMD1:1994). The actual battery life depends on battery quality, use pattern, active feature set, hearing loss and sound environment.
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels, incl. direct stereo streaming from a TV (25% of the time) and streaming from a mobile phone (6% of the time).

Oticon Opn S 1

miniRITE 105

Technical data		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	ZCC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
105 Power Receiver Mold			
OSPL90	Peak	135 dB SPL	127 dB SPL
	1600 Hz	132 dB SPL	125 dB SPL
	HFA-OSPL90	130 dB SPL	122 dB SPL
Full-on gain ¹	Peak	72 dB	64 dB
	1600 Hz	65 dB	57 dB
	HFA-FOG	65 dB	57 dB
Reference test gain		58 dB	46 dB
Frequency range		100-8200 Hz	100-7800 Hz
Telecoil output (1600 Hz)	1 mA/m field	-	-
	10 mA/m field	-	-
	SPLITS L/R	-	-
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<2 %	<2 %
	800 Hz	<2 %	<2 %
	1600 Hz	<3 %	<2 %
Equivalent input noise level	Omni	18 dB SPL	18 dB SPL
	Dir	28 dB SPL	29 dB SPL
Battery consumption ²	Typical	1.6 mA	1.7 mA
	Quiescent	1.5 mA	1.5 mA
Battery life, artificial measurement, hours ³		110	105
Expected battery life, hours (battery size 312 - IEC PR41) ⁴		45-65	
IRIL (IEC 60118-13:2011)		800/1400/2000 MHz: 31/<16/<16 dB SPL	

1) Measured with the gain control of the hearing aid set to its 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+A1:1994 but without influence of feedback.
2) Battery current is measured according to IEC 60118-0:1983/AMD1:1994 §7.11, IEC 60118-0:2015 §7.7 and ANSI S3.22:2014 §6.13 after a settling time of minimum 3 minutes.
3) Based on the standardized battery consumption measurement (IEC 60118-0:1983/AMD1:1994). The actual battery life depends on battery quality, use pattern, active feature set, hearing loss and sound environment.
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels, incl. direct stereo streaming from a TV (25% of the time) and streaming from a mobile phone (6% of the time).

Oticon Opn S 2 & 3

miniRITE 105

Technical data		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	ZCC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
105 Power Receiver Mold			
OSPL90	Peak	135 dB SPL	127 dB SPL
	1600 Hz	132 dB SPL	125 dB SPL
	HFA-OSPL90	130 dB SPL	122 dB SPL
Full-on gain ¹	Peak	72 dB	64 dB
	1600 Hz	65 dB	57 dB
	HFA-FOG	65 dB	57 dB
Reference test gain		58 dB	46 dB
Frequency range		100-7500 Hz	100-6500 Hz
Telecoil output (1600 Hz)	1 mA/m field	-	-
	10 mA/m field	-	-
	SPLITS L/R	-	-
Total harmonic distortion (Input 70 dB SPL)	500 Hz	<2 %	<2 %
	800 Hz	<2 %	<2 %
	1600 Hz	<3 %	<2 %
Equivalent input noise level	Omni	18 dB SPL	18 dB SPL
	Dir	28 dB SPL	29 dB SPL
Battery consumption ²	Typical	1.6 mA	1.7 mA
	Quiescent	1.5 mA	1.5 mA
Battery life, artificial measurement, hours ³		110	105
Expected battery life, hours (battery size 312 - IEC PR41) ⁴		45-65	
IRIL (IEC 60118-13:2011)		800/1400/2000 MHz: 31/<16/<16 dB SPL	

1) Measured with the gain control of the hearing aid set to its 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+A1:1994 but without influence of feedback.
2) Battery current is measured according to IEC 60118-0:1983/AMD1:1994 §7.11, IEC 60118-0:2015 §7.7 and ANSI S3.22:2014 §6.13 after a settling time of minimum 3 minutes.
3) Based on the standardized battery consumption measurement (IEC 60118-0:1983/AMD1:1994). The actual battery life depends on battery quality, use pattern, active feature set, hearing loss and sound environment.
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels, incl. direct stereo streaming from a TV (25% of the time) and streaming from a mobile phone (6% of the time).

Notes

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Notes

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Notes

This image shows a full page of white paper with horizontal grey ruling lines. The lines are evenly spaced and run across the width of the page. In the top left corner, there is a small vertical pink bar. To its right, the word "Solutions" is printed in a small, dark font. Below "Solutions", the word "Notes" is printed in a larger, bold, dark font.

Solutions

Notes



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