

Technical data sheet

miniRITE R

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: +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 shall 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

Oticon Opn S™ miniRITE R is a discreet style powered by a rechargeable lithium-ion battery. The inductive charger secures reliable and fast charging within 3 hours for a full charge.

miniRITE R features telecoil and a convenient double pushbutton.

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 secure 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.



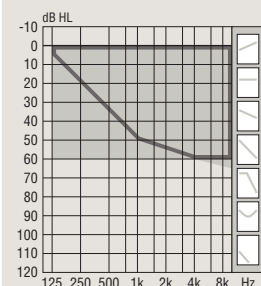
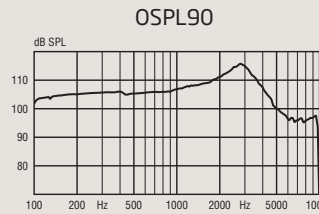
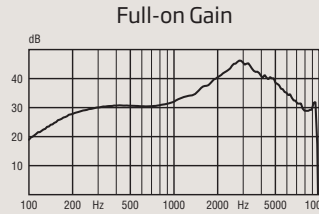
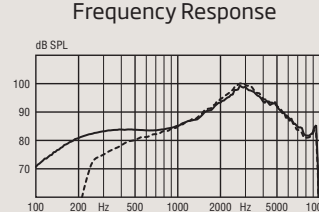
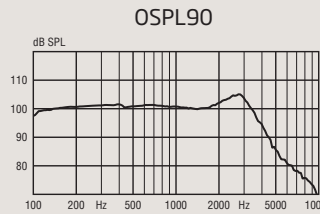
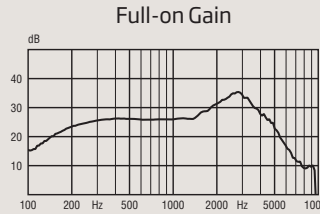
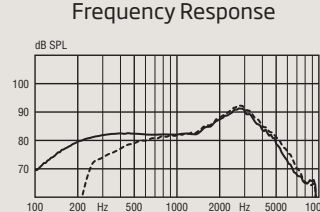
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Oticon Opn S 1

miniRITE R 60

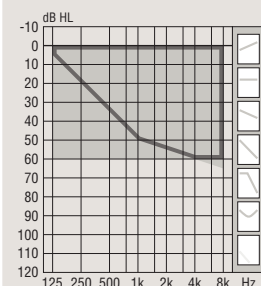
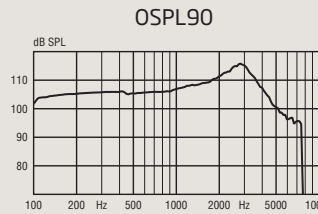
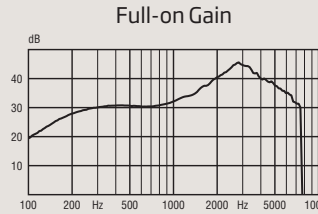
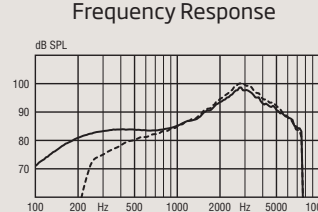
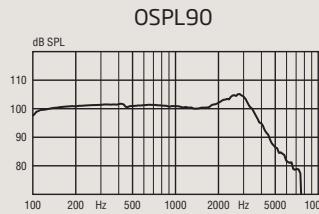
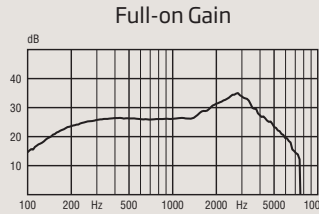
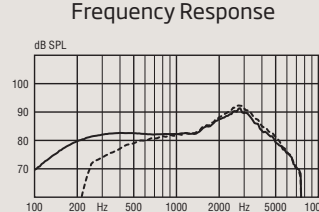
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  Mold, Bass & Power dome Open dome Technical information Omnidirectional mode is used unless otherwise stated.		      Acoustic input: 60 dB SPL Magnetic input: 31.6 mA/m	
OSPL90	Peak 1600 Hz HFA-OSPL90	116 dB SPL 109 dB SPL 110 dB SPL	105 dB SPL 100 dB SPL 102 dB SPL
Full-on gain*	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	67 dB SPL 87 dB SPL -	- - 85/85 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	21 dB SPL 28 dB SPL	18 dB SPL 27 dB SPL
Battery		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

* 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.

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

Oticon Opn S 2 & 3

miniRITE R 60

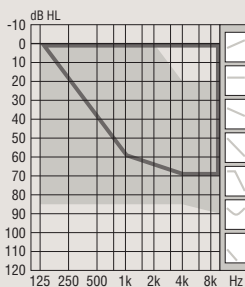
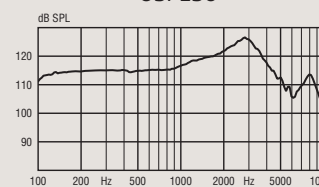
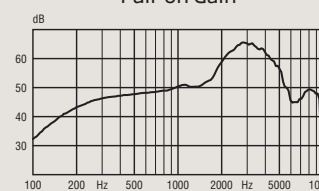
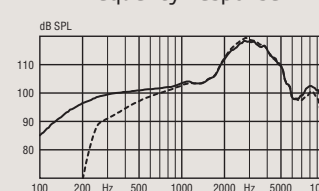
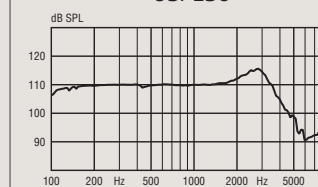
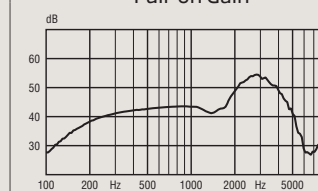
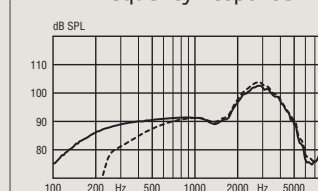
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OSPL90	Peak 1600 Hz HFA-OSPL90	116 dB SPL 109 dB SPL 110 dB SPL	105 dB SPL 100 dB SPL 102 dB SPL
Full-on gain*	Peak 1600 Hz HFA-FOG	46 dB 37 dB 38 dB	35 dB 29 dB 30 dB
Reference test gain		30 dB	26 dB
Frequency range		110-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	67 dB SPL 87 dB SPL -	- - 85/85 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	22 dB SPL 30 dB SPL	19 dB SPL 28 dB SPL
Battery		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

* 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.

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

Oticon Opn S 1

miniRITE R 85

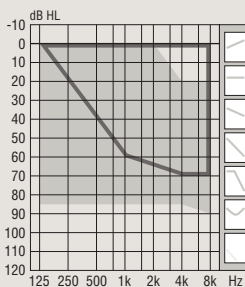
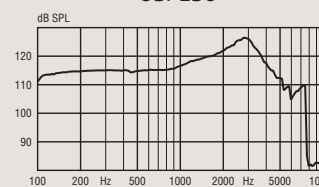
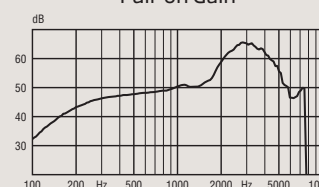
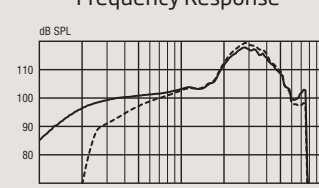
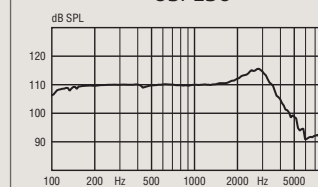
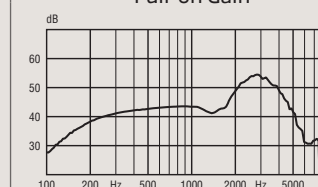
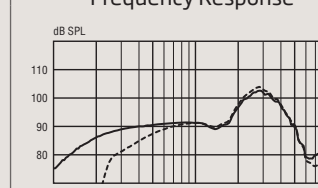
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OSPL90	Peak 1600 Hz HFA-OSPL90	127 dB SPL 120 dB SPL 121 dB SPL	116 dB SPL 111 dB SPL 112 dB SPL
Full-on gain*	Peak 1600 Hz HFA-FOG	66 dB 52 dB 55 dB	54 dB 43 dB 47 dB
Reference test gain		45 dB	34 dB
Frequency range		120-9500 Hz	100-8500 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	82 dB SPL 102 dB SPL -	- - 94/94 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	25 dB SPL 32 dB SPL	20 dB SPL 29 dB SPL
Battery		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

* 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.

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

Oticon Opn S 2 & 3

miniRITE R 85

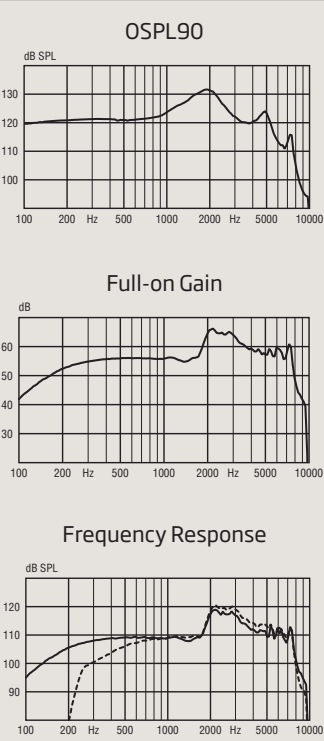
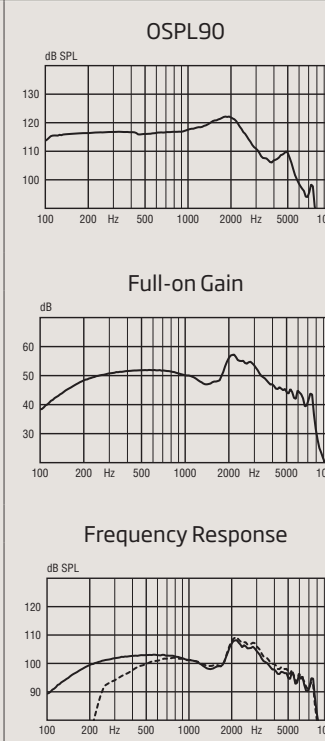
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OSPL90	Peak 1600 Hz HFA-OSPL90	127 dB SPL 120 dB SPL 121 dB SPL	116 dB SPL 111 dB SPL 112 dB SPL
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Reference test gain		45 dB	34 dB
Frequency range		120-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz)	1 mA/m field 10 mA/m field SPLITS L/R	82 dB SPL 102 dB SPL -	- - 94/94 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	26 dB SPL 33 dB SPL	21 dB SPL 30 dB SPL
Battery		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

* 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.

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

Oticon Opn S 1

miniRITE R 100

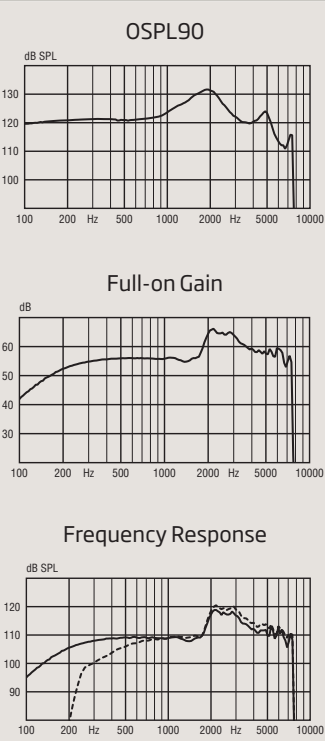
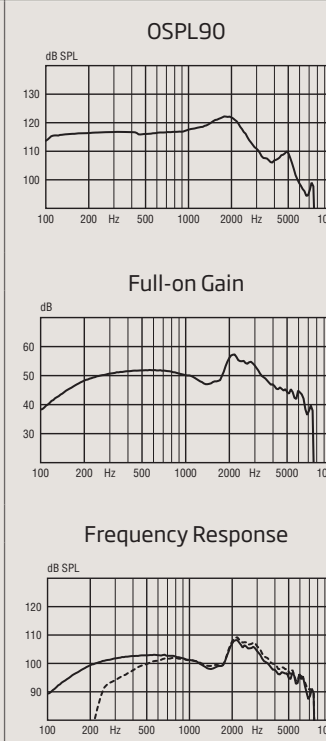
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Technical information Omnidirectional mode is used unless otherwise stated.			
Warning to the instrument dispenser The maximum output capability of the hearing aid may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument, as there may be risk of impairing the remaining hearing of the hearing aid user.			
OSPL90 Peak 1600 Hz HFA-OSPL90		132 dB SPL 130 dB SPL 127 dB SPL	122 dB SPL 121 dB SPL 118 dB SPL
Full-on gain* Peak 1600 Hz HFA-FOG		66 dB 56 dB 59 dB	57 dB 48 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		86 dB SPL 106 dB SPL -	- - 103/103 dB SPL
Total harmonic distortion (Input 70 dB SPL) 500 Hz 800 Hz 1600 Hz		<7 % <4 % <2 %	<2 % <2 % <2 %
Equivalent input noise level Omni Dir		23 dB SPL 32 dB SPL	19 dB SPL 30 dB SPL
Battery		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

* 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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Oticon Opn S 2 & 3

miniRITE R 100

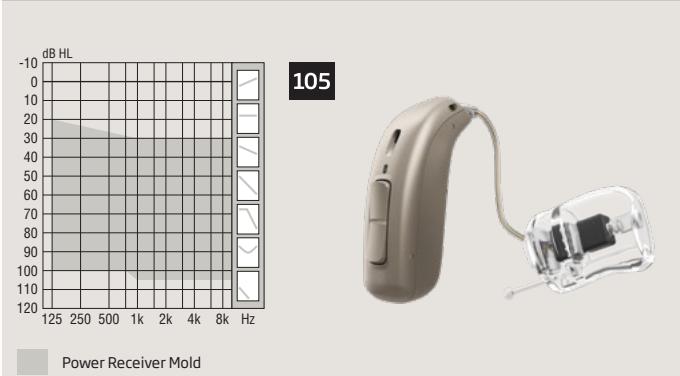
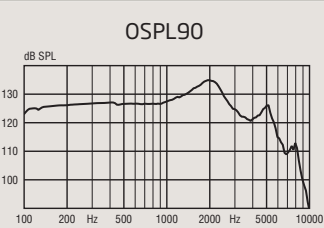
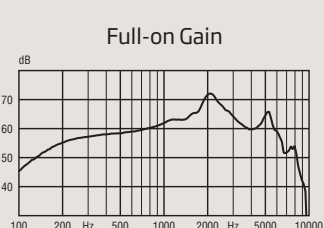
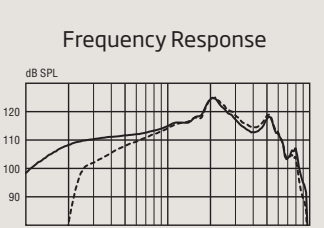
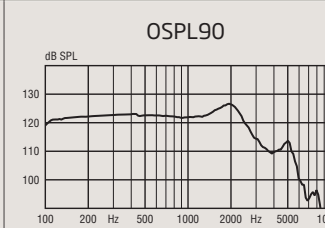
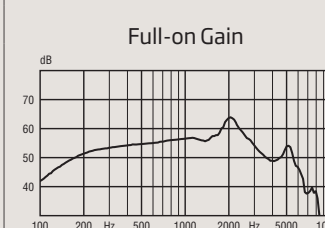
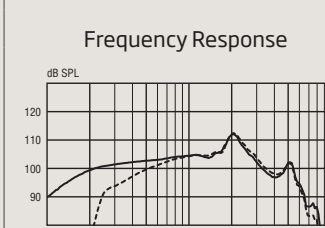
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Full-on gain* Peak 1600 Hz HFA-FOG		66 dB 56 dB 59 dB	57 dB 48 dB 51 dB
Reference test gain		49 dB	42 dB
Frequency range		100-7500 Hz	100-7500 Hz
Telecoil output (1600 Hz) 1 mA/m field 10 mA/m field SPLITS L/R		86 dB SPL 106 dB SPL -	- - 103/103 dB SPL
Total harmonic distortion (Input 70 dB SPL) 500 Hz 800 Hz 1600 Hz		<7 % <4 % <2 %	<2 % <2 % <2 %
Equivalent input noise level Omni Dir		23 dB SPL 32 dB SPL	19 dB SPL 30 dB SPL
Battery		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

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Oticon Opn S 1

miniRITE R 105

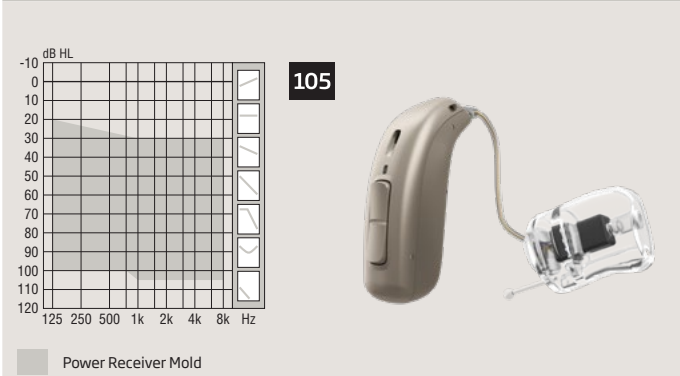
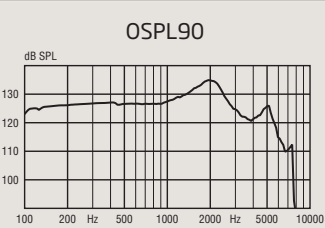
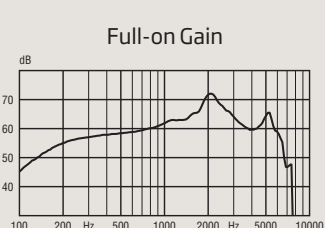
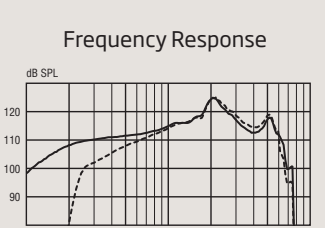
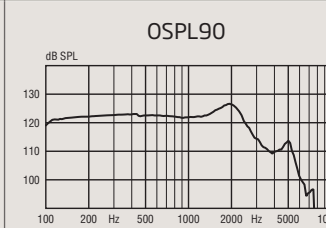
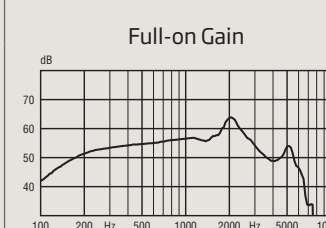
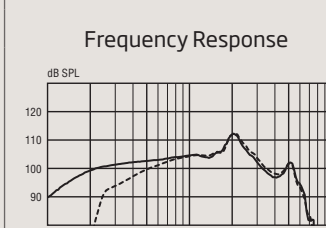
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Warning to the instrument dispenser The maximum output capability of the hearing aid may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument, as there may be risk of impairing the remaining hearing of the hearing aid user.			
OSPL90		135 dB SPL	127 dB SPL
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*			
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
1 mA/m field		96 dB SPL	-
Telecoil output (1600 Hz)		10 mA/m field	-
SPLITS L/R		-	105/105 dB SPL
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		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

* 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.

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

Oticon Opn S 2 & 3

miniRITE R 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	2CC Coupler Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006
		  	  
Technical information Omnidirectional mode is used unless otherwise stated.			
Warning to the instrument 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 instrument, as there may be risk of impairing the remaining hearing of the hearing aid user.			
OSPL90		135 dB SPL	127 dB SPL
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*			
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
1 mA/m field		96 dB SPL	-
Telecoil output (1600 Hz)		10 mA/m field	-
SPLITS L/R		-	105/105 dB SPL
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		Lithium-ion	Lithium-ion
Expected operating time, hours**		24	

* 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.

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

Notes

This image shows a full page of white paper with horizontal grey ruling lines. The word "Notes" is printed at the top left corner. There are 21 horizontal lines in total, creating 20 equal-sized rows for writing.



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