Pure® primax

Technical Data

| 7px | 5px | 3px |

S-Receiver
- 56 dB / 119 dB SPL
  (ear simulator)
- 45 dB / 108 dB SPL
  (2 ccm coupler)

M-Receiver
- 70 dB / 129 dB SPL
  (ear simulator)
- 60 dB / 119 dB SPL
  (2 ccm coupler)

P-Receiver
- 80 dB / 134 dB SPL
  (ear simulator)
- 70 dB / 124 dB SPL
  (2 ccm coupler)

HP-Receiver
- 82 dB / 138 dB SPL
  (ear simulator)
- 75 dB / 130 dB SPL
  (2 ccm coupler)

Hearing
Systems

SIEMENS

Pure primax | Technical Data

Type	S-Receiver		M-Receiver	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	–	109 dB SPL	–	122 dB SPL
Peak	108 dB SPL	119 dB SPL	119 dB SPL	129 dB SPL
HFA-OSPL 90	102 dB SPL	–	114 dB SPL	–
Gain				
Full on gain (FOG) at 1.6 kHz	–	43 dB	–	55 dB
Full on gain (Peak)	45 dB	56 dB	60 dB	70 dB
HFA-FOG	37 dB	–	50 dB	–
Reference test gain	25 dB	34 dB	37 dB	47 dB
Frequency, noise and directivity				
Frequency range 7px 5px / 3px	100-10000 Hz 100-8200 Hz	100-10500 Hz 100-8300 Hz	100-8800 Hz 100-8200 Hz	100-10000 Hz 100-8300 Hz
Equivalent input noise	18 dB SPL	22 dB SPL	19 dB SPL	23 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	1 / 1 / 1 %	1 / 1 / 2 %	1 / 1 / 2 %	1 / 3 / 3 %
Tinnitus therapy broadband	65 dB	–	70 dB	–
AI-DI	3.8 dB		3.8 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	75 dB SPL	–	85 dB SPL
HFA MASL (1 mA/m)	68 dB SPL	–	80 dB SPL	–
HFA SPLITS (left/right)	84 / 84 dB SPL	–	96 / 96 dB SPL	–
RSETS (left/right)	-1 / -1 dB SPL	–	-1 / -1 dB SPL	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	0.9 mA		1.0 mA	
Battery life (cell zinc air)	~130 h		~120 h	
Battery life (rechargeable)	12 - 16 h		–	
IRIL IEC 118-13:2011 (bystander)				
800-960 MHz	<-6 dB SPL		<-6 dB SPL	
1400-2000 MHz	<-24 dB SPL		<-24 dB SPL	
ANSI C63.19	M4 / T4		M4 / T4	

Pure primax | Technical Data

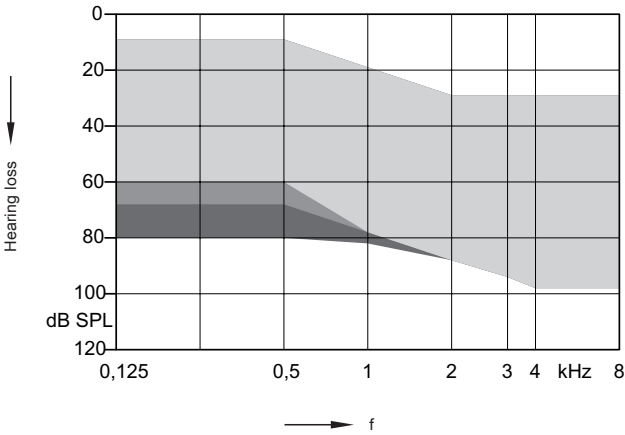| Type	P-Receiver		HP-Receiver	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	–	128 dB SPL	–	137 dB SPL
Peak	124 dB SPL	134 dB SPL	130 dB SPL	138 dB SPL
HFA-OSPL 90	120 dB SPL	–	124 dB SPL	–
Gain				
Full on gain (FOG) at 1.6 kHz	–	70 dB	–	82 dB
Full on gain (Peak)	70 dB	80 dB	75 dB	82 dB
HFA-FOG	63 dB	–	68 dB	–
Reference test gain	43 dB	53 dB	48 dB	62 dB
Frequency, noise and directivity				
Frequency range 7px 5px / 3px	100-7800 Hz 100-7800 Hz	100-8100 Hz 100-7800 Hz	100-7500 Hz 100-7400 Hz	250-5200 Hz 250-5200 Hz
Equivalent input noise	18 dB SPL	21 dB SPL	18 dB SPL	12 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	2 / 2 / 1 %	3 / 3 / 2 %	1 / 2 / 1 %	1 / 1 / 1 %
Tinnitus therapy broadband	75 dB	–	85 dB	–
AI-DI	3.8 dB		3.8 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	100 dB SPL	–	114 dB SPL
HFA MASL (1 mA/m)	91 dB SPL	–	99 dB SPL	–
HFA SPLITS (left/right)	102 / 102 dB SPL	–	107 / 107 dB SPL	–
RSETS (left/right)	-1 / -1 dB SPL	–	-1 / -1 dB SPL	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	1.0 mA		1.1 mA	
Battery life (cell zinc air)	~120 h		~110 h	
Battery life (rechargeable)	–		–	
IRIL IEC 118-13:2011 (bystander)				
800-960 MHz	<-6 dB SPL		<-6 dB SPL	
1400-2000 MHz	<-24 dB SPL		<-24 dB SPL	
ANSI C63.19	M4 / T4		M4 / T4	

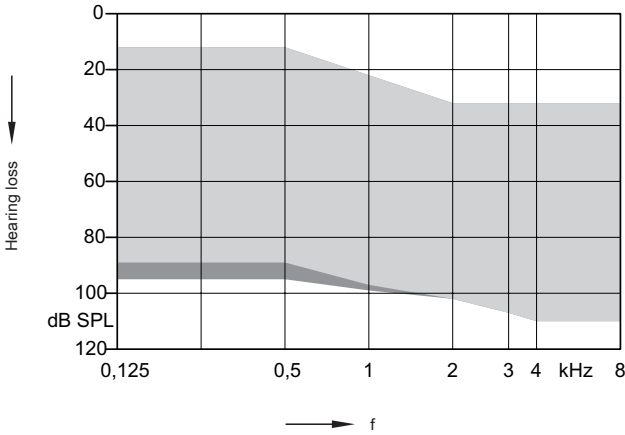# Pure primax | Fitting Range

S-Receiver
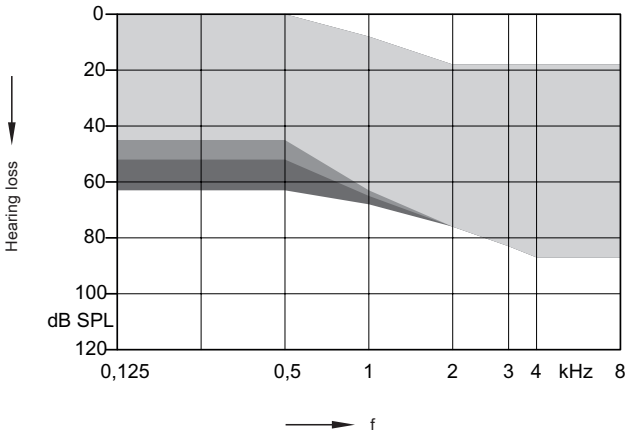
Open Click Domes
+ ▨ Closed Click Domes
+ ▨ + ▨ Click Mold (no vent)
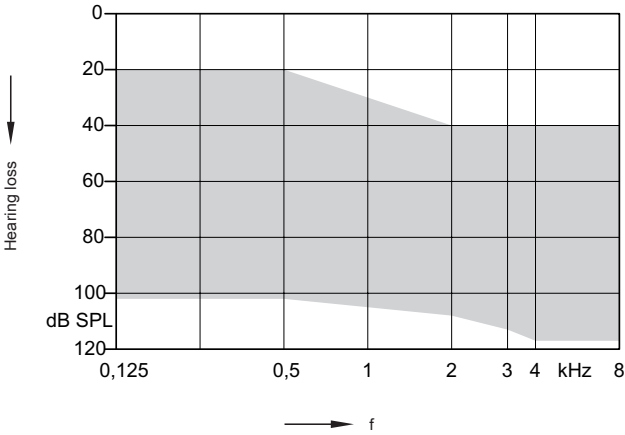
M-Receiver

Open Click Domes
+ ▨ Closed Click Domes
+ ▨ + ▨ Click Mold (no vent)

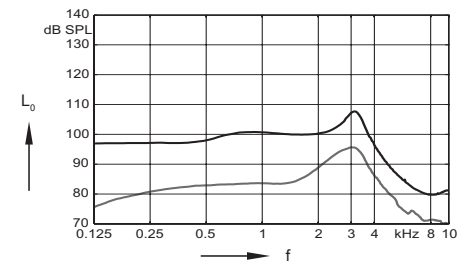## P-Receiver

Double Click Domes
+ ▨ Click Mold Domes
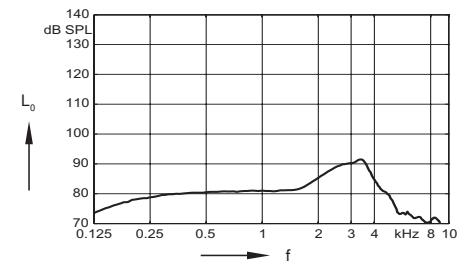
HP-Receiver

Custom Shell (no vent)

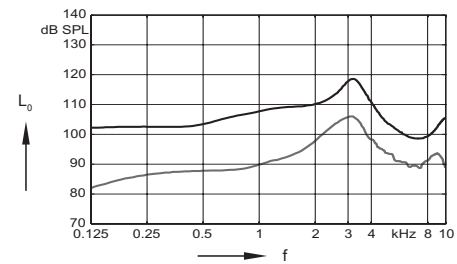# S-Receiver (Closed Click Dome) | Basic Data

2 ccm coupler

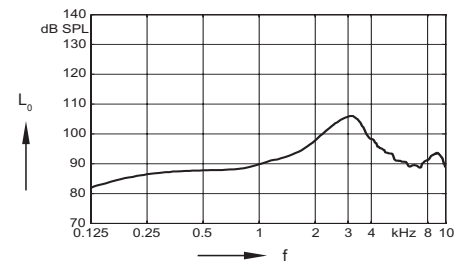**Output sound pressure level (L_i = 90 dB)**

Full on gain (L_i = 50 dB)

Frequency response (L_i = 60 dB)

Ear simulator

Output sound pressure level (L_i = 90 dB)

Full on gain (L_i = 50 dB)

Basic acoustic response (L_i = 60 dB)

Inductive response

Inductive response (H = 10 mA/m)

SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)

M-Receiver (Closed Click Dome) │ Basic Data

2 ccm coupler

Output sound
pressure level
(L_i = 90 dB)

Full on gain
(L_i = 50 dB)

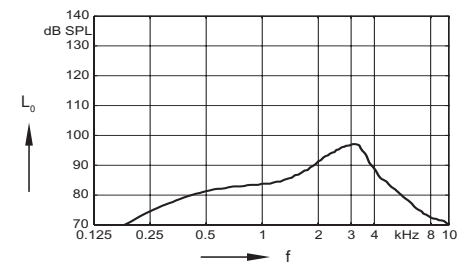Frequency response
(L_i = 60 dB)

Ear simulator

Output sound
pressure level
(L_i = 90 dB)
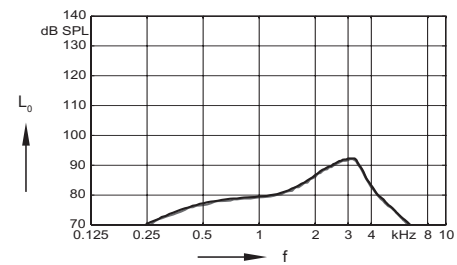
Full on gain
(L_i = 50 dB)

Basic acoustic
response
(L_i = 60 dB)

Inductive response
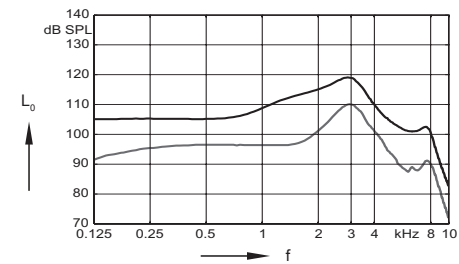
Inductive response
(H = 10 mA/m)

SPLITS curve left
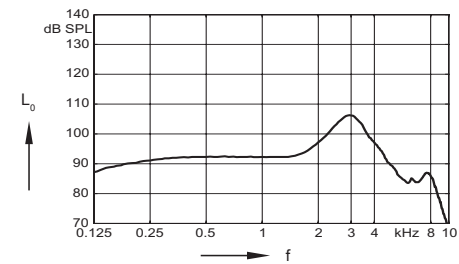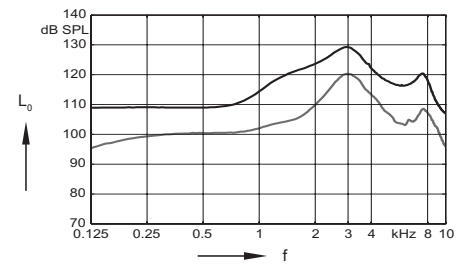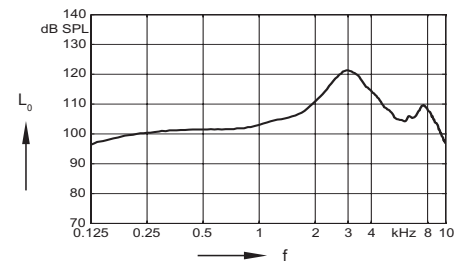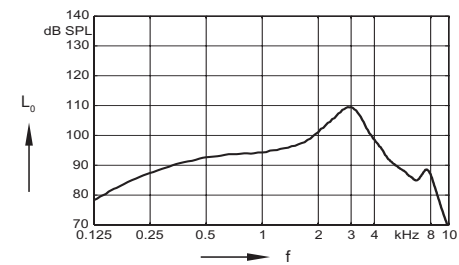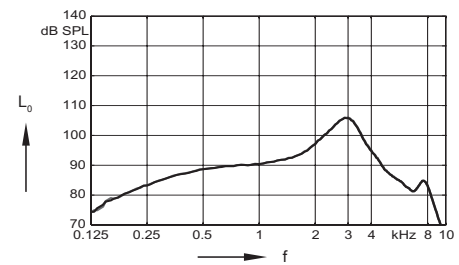(H = 31.6 mA/m)

SPLITS curve right
(H = 31.6 mA/m)

P-Receiver (Click mold) | Basic Data

2 ccm coupler

Output sound pressure level (L$_i$ = 90 dB)

Full on gain (L$_i$ = 50 dB)

Frequency response (L$_i$ = 60 dB)

Ear simulator

Output sound pressure level (L$_i$ = 90 dB)

Full on gain (L$_i$ = 50 dB)

Basic acoustic response (L$_i$ = 60 dB)

Inductive response

Inductive response (H = 10 mA/m)

SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)

HP-Receiver (Custom Shell) | Basic Data

2 ccm coupler

Output sound pressure level (L$_i$ = 90 dB)

Full on gain (L$_i$ = 50 dB)

Frequency response (L$_i$ = 60 dB)

Ear simulator

Output sound pressure level (L$_i$ = 90 dB)

Full on gain (L$_i$ = 50 dB)

Basic acoustic response (L$_i$ = 60 dB)

Inductive response
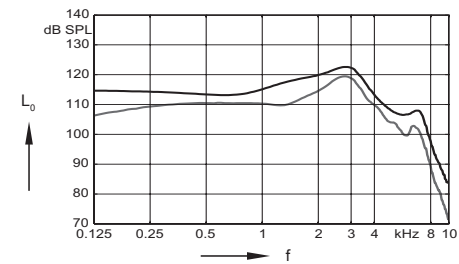

Inductive response (H = 10 mA/m)

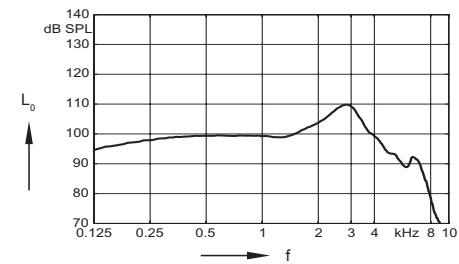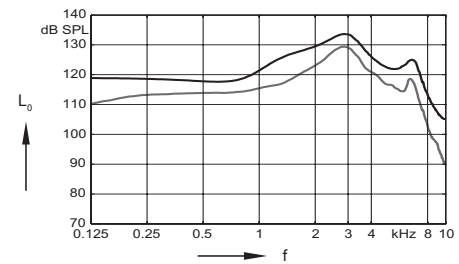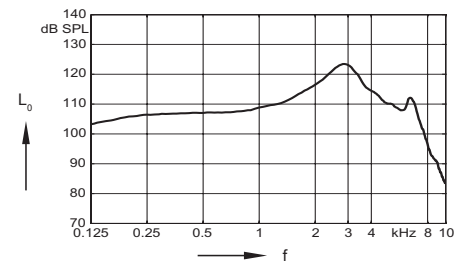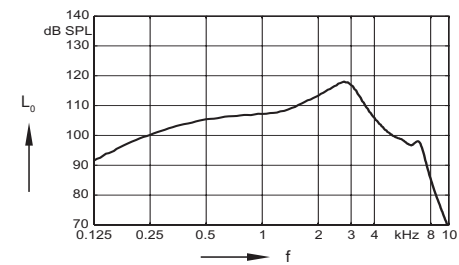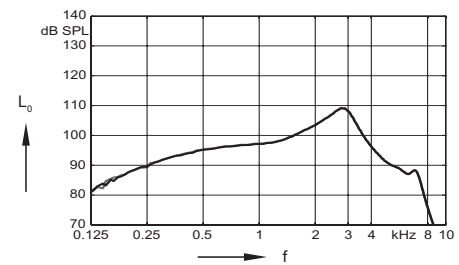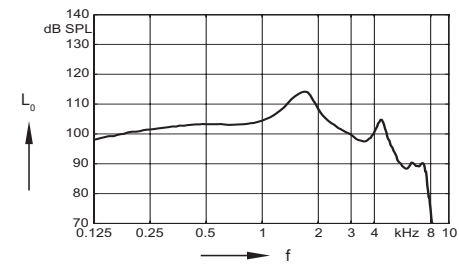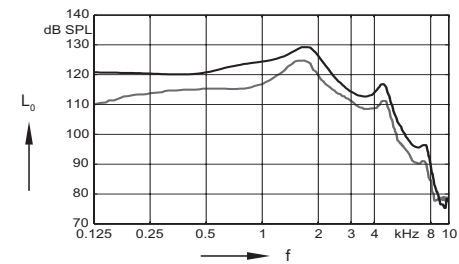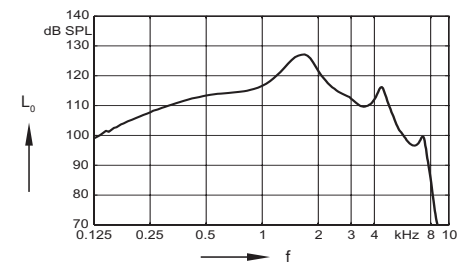**SPLITS curve left (H = 31.6 mA/m)**

SPLITS curve right (H = 31.6 mA/m)
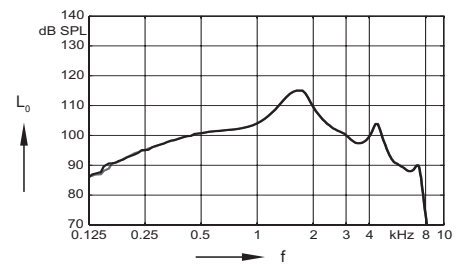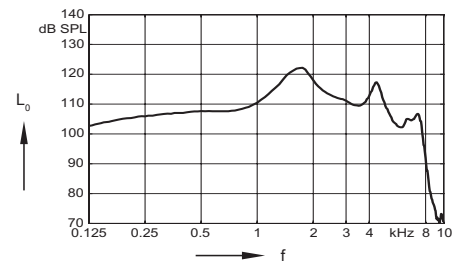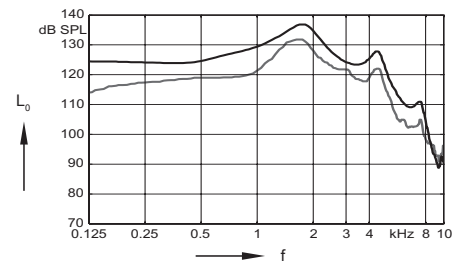
Pure primax | Features and Accessories

	7px	5px	3px
Audiology			
Signal processing (channels) **/ Gain/MPO** (handles)	48 / 20	32 / 16	24 /12
Hearing programs	6	6	6
SpeechMaster	●	●	●
HD Music (presets)	3	1	1
TwinPhone[1]	●	●	●
EchoShield	●	—	—
Wireless CROS/BICROS[2]	●	●	●
Directionality (channels)	48	32	24
Narrow Directionality[1]	▪▪▪▪▪	▪▪▪▪	▪▪▪
Directional microphone	▪▪▪▪▪	▪▪▪▪	▪▪▪
Spatial SpeechFocus[1]	▪▪▪▪▪	—	—
SpeechFocus	▪▪▪▪	▪▪▪▪	—
TruEar™	▪▪▪▪▪	▪▪▪▪	▪▪▪
Frequency compression	●	●	●
Extended bandwidth	●	—	—
Feedback cancellation	●	●	●
eWindScreen binaural[1]	●	●	—
eWindScreen® (steps)	3	3	on / off
Noise Reduction (channels / steps)	48 / 5	32 / 5	24 / 3
Speech and noise management (steps)	7	5	3
SoundSmoothing™ (steps)	3	3	1
Directional speech enhancement (steps)	3	1	—
Adaptive streaming volume[3]	●	—	—
SoundBrilliance™ [3]	●	●	—
Sound equalizer (classes)	6	3	—
User Controls, remote controls, streaming			
touchControl™ App (iOS™ / Android™)	●	●	●
easyTek™ / easyPocket™	● / ●	● / ●	● / ●
Spatial Configurator[1]	●	●	—
Span[4]	●	●	—
Direction[5]	●	●	—
SoundBalance	●	●	●
Fitting			
Insitugram	●	●	●
Learning (classes) **/ Data logging**	6 / ●	3 / ●	1 / ●
Acclimatization manager	●	●	●
Tinnitus			
Tinnitus therapy			
Static therapy signal (handles / presets)	20 / 5	16 / 5	12 / 5
Ocean Waves therapy signal (presets)	4	4	4

Pure primax | Features and Accessories

	7px / 5px / 3px
Style Specific Features	
Ingress Protection Rating	IP67
Telecoil	●
AutoPhone®	●
Charging contacts	●
Battery Size	312
Battery door on/off function	●
Nanocoated housing	●
e2e wireless® 3.0	●
Audio streaming with easyTek	●
User controls coupling via e2e	●
Wireless programming via ConnexxLink®	●
Instrument configurations	
Flat cover	○
Rotary volume control	—
Push button	○
Rocker switch	●
Color conversion kit	○
Battery door – direct audio input	—
Battery door – child lock	—
Programming Accessories	
ConnexxLink	●
Programming pill	●
Accessories	
CROS Pure	○
eCharger™	○
easyPocket™	○
easyTek	○
Transmitter (req. easyTek)	○
VoiceLink™ (req. easyTek)	○
App	
easyTek App (req. easyTek)	○
touchControl App	○

● available ▦▦▦▦▦ highest feature performance ○ optional — not available

[1] req. bilateral fitting and e2e™ 3.0
[2] req. CROS Pure accessory
[3] streaming only, req. easyTek™
[4] req. easyTek & easyTek App, touchControl App or Rocker switch
[5] req. easyTek & easyTek App or touchControl App

Notes

Abbreviations and Standards

Abbreviations

The following abbreviations are used in this datasheet:

OSPL	Output Sound Pressure Level
HFA	High Frequency Average
FOG	Full-On Gain
MASL	Magneto Acoustical Sensitivity Level
SPLITS	Coupler SPL for an Inductive Telephone Simulator
RSETS	Relative Equivalent Telephone Sensitivity
AI-DI	Articulation Index - Directivity Index
IRIL	Input Related Interference Level
RTF	Reference Test Frequency

Standards

▶ All measurements with the 2 ccm coupler were performed according to ANSI S3.22-2009 and IEC 60118-7:2005 if applicable.
▶ All measurements with an ear simulator were performed according to IEC 118-0/A1 and to DIN 45605 (frequency range) if applicable.
▶ Tinnitus therapy feature measurement conditions: all tinnitus single frequency sliders in max position, master volume slider in default position (0 dB) and local volume control in default position.
▶ The following ear pieces were used:
  - S-Receiver Unit and M-Receiver Unit: Closed Click Dome
  - P-Receiver Unit: Click Mold
  - HP-Receiver Unit: Custom Shell
▶ Extended frequency range up to 12 kHz for 7px devices only.

The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases and are subject to change without prior notice. The required features should therefore be specified in each individual case at the time of conclusion of the respective contract.

iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

Android™ and Google Play™ are trademarks of Google Inc.

1/16 1.0 SI/16519-16

⚠ **CAUTION**
Choking hazard posed by small parts.
▶ This instrument is not intended for the fitting of infants, children under 3 years and persons of mental incapacity.

⚠ **CAUTION**
Instrument has an output sound pressure level of 132 dB SPL or more.
Risk of impairing the residual hearing of the user.
▶ Take special care when fitting this instrument.