

Intuis 3 S / M / P / SP

Technical Data



Intuis 3 S

Earhook damped

- 62 dB / 132 dB SPL (ear simulator)
- 55 dB / 124 dB SPL (2 ccm coupler)

LifeTube

- 53 dB / 125 dB SPL (ear simulator)
- 45 dB / 124 dB SPL (2 ccm coupler)

Intuis 3 M

Earhook damped

- 68 dB / 136 dB SPL (ear simulator)
- 60 dB / 130 dB SPL (2 ccm coupler)

LifeTube

- 62 dB / 128 dB SPL (ear simulator)
- 53 dB / 125 dB SPL (2 ccm coupler)

Intuis 3 P

Earhook undamped



- 75 dB / 138 dB SPL (ear simulator)
- 70 dB / 134 dB SPL (2 ccm coupler)

Intuis 3 SP



Earhook undamped

- 84 dB / 144 dB SPL (ear simulator)
- 80 dB / 140 dB SPL (2 ccm coupler)

Intuis 3 S | Technical Data

Type	Earhook damped		LifeTube	
				
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	–	129 dB SPL	–	116 dB SPL
Peak	124 dB SPL	132 dB SPL	124 dB SPL	125 dB SPL
HFA-OSPL 90	121 dB SPL	–	113 dB SPL	–
Gain				
Full on gain (FOG) at 1.6 kHz	–	49 dB	–	48 dB
Full on gain (Peak)	55 dB	62 dB	45 dB	53 dB
HFA-FOG	42 dB	–	41 dB	–
Reference test gain	42 dB	42 dB	36 dB	41 dB
Frequency, noise and directivity				
Frequency range	100-7100 Hz	1000-7100 Hz	100-7100 Hz	280-7100 Hz
Equivalent input noise	20 dB SPL	23 dB SPL	15 dB SPL	15 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	2 / 1 / 1 %	2 / 1 / 1 %	1 / 1 / 2 %	1 / 1 / 2 %
Tinnitus noiser broadband	–	–	–	–
AI-DI	3.5 dB		3.5 dB	
Latency	< 15 ms		< 15 ms	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	–	–	–
HFA MASL (1 mA/m)	–	–	–	–
HFA SPLITS (left/right)	–	–	–	–
RSETS (left/right)	–	–	–	–
HFA SPLIV	–	–	–	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	0.9 mA		0.9 mA	
Battery life (cell zinc air)	~125 h		~125 h	
Battery life (rechargeable)	–		–	
IRIL IEC 118-13:2011 (bystander)				
800-960 MHz	<-10 dB SPL		<-10 dB SPL	
1400-2000 MHz	<-10 dB SPL		<-10 dB SPL	
ANSI C63.19	M3		M3	

Intuis 3 M | Technical Data

Type	Earhook damped		LifeTube	
				
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	–	133 dB SPL	–	121 dB SPL
Peak	130 dB SPL	136 dB SPL	125 dB SPL	128 dB SPL
HFA-OSPL 90	126 dB SPL	–	116 dB SPL	–
Gain				
Full on gain (FOG) at 1.6 kHz	–	61 dB	–	54 dB
Full on gain (Peak)	60 dB	68 dB	53 dB	62 dB
HFA-FOG	53 dB	–	46 dB	–
Reference test gain	49 dB	54 dB	39 dB	46 dB
Frequency, noise and directivity				
Frequency range	100-7000 Hz	320-7200 Hz	100-7000 Hz	120-7200 Hz
Equivalent input noise	19 dB SPL	19 dB SPL	19 dB SPL	19 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	2 / 2 / 1 %	2 / 2 / 1 %	1 / 1 / 2 %	1 / 1 / 3 %
Tinnitus noiser broadband	–	–	–	–
AI-DI	3.5 dB		3.5 dB	
Latency	< 15 ms		< 15 ms	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	89 dB SPL	–	82 dB SPL
HFA MASL (1 mA/m)	82 dB SPL	–	74 dB SPL	–
HFA SPLITS (left/right)	102 / 105 dB SPL	–	93 / 95 dB SPL	–
RSETS (left/right)	-7 / -4 dB	–	-6 / -4 dB	–
HFA SPLIV	109 dB	–	98 dB	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	1.0 mA		1.0 mA	
Battery life (cell zinc air)	~220 h		~220 h	
Battery life (rechargeable)	–		–	
IRIL IEC 118-13:2011 (bystander)				
800-960 MHz	<-20 dB SPL		<-20 dB SPL	
1400-2000 MHz	<-15 dB SPL		<-15 dB SPL	
ANSI C63.19	M4 / T2		M4 / T2	

Intuis 3 P | Technical Data

Type

Earhook undamped



	2 ccm coupler	Ear simulator
Output sound pressure level		
at 1.6 kHz	–	133 dB SPL
Peak	134 dB SPL	138 dB SPL
HFA-OSPL 90	127 dB SPL	–
Gain		
Full on gain (FOG) at 1.6 kHz	–	69 dB
Full on gain (Peak)	70 dB	75 dB
HFA-FOG	64 dB	–
Reference test gain	50 dB	58 dB
Frequency, noise and directivity		
Frequency range	110-6000 Hz	170-6700 Hz
Equivalent input noise	24 dB SPL	24 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	3 / 2 / 1 %	4 / 4 / 1 %
Tinnitus noiser broadband	–	–
AI-DI	3.5 dB	
Latency	< 15 ms	< 15 ms
Inductive coil sensitivity		
MASL (1 mA/m) at 1.6 kHz	–	97 dB SPL
HFA MASL (1 mA/m)	93 dB SPL	–
HFA SPLITS (left/right)	110 / 107 dB SPL	–
RSETS (left/right)	0 / -3 dB	–
HFA SPLIV	109 dB	–
Battery		
Battery voltage	1.3 V	
Battery current drain	1.4 mA	
Battery life (cell zinc air)	~160 h	
Battery life (rechargeable)	–	
IRIL IEC 118-13:2011 (bystander)		
800-960 MHz	<-35 dB SPL	
1400-2000 MHz	<-24 dB SPL	
ANSI C63.19	M3 / T3	

Intuis 3 SP | Technical Data

Type

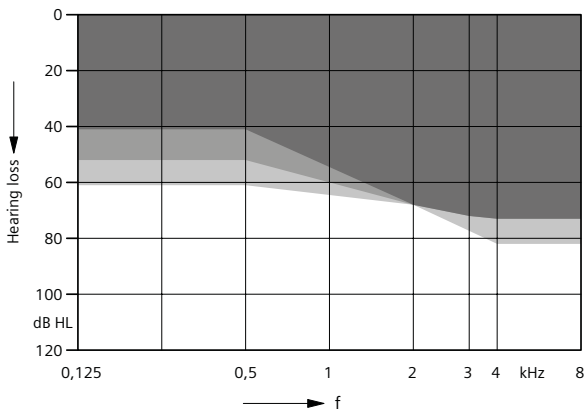
Earhook undamped



	2 ccm coupler	Ear simulator
Output sound pressure level		
at 1.6 kHz	–	139 dB SPL
Peak	140 dB SPL	144 dB SPL
HFA-OSPL 90	133 dB SPL	–
Gain		
Full on gain (FOG) at 1.6 kHz	–	76 dB
Full on gain (Peak)	80 dB	84 dB
HFA-FOG	72 dB	–
Reference test gain	56 dB	64 dB
Frequency, noise and directivity		
Frequency range	100-5600 Hz	100-5900 Hz
Equivalent input noise	24 dB SPL	26 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	3 / 2 / 1 %	7 / 3 / 2 %
Tinnitus noiser broadband	–	–
AI-DI	3.6 dB	
Latency	< 15 ms	< 15 ms
Inductive coil sensitivity		
MASL (1 mA/m) at 1.6 kHz	–	107 dB SPL
HFA MASL (1 mA/m)	102 dB SPL	–
HFA SPLITS (left/right)	115 / 112 dB SPL	–
RSETS (left/right)	-1 / -4 dB	–
HFA SPLIV	116 dB	–
Battery		
Battery voltage	1.3 V	
Battery current drain	2.4 mA	
Battery life (cell zinc air)	~160 h	
Battery life (rechargeable)	–	
IRIL IEC 118-13:2011 (bystander)		
800-960 MHz	<-34 dB SPL	
1400-2000 MHz	<-34 dB SPL	
ANSI C63.19	M3 / T4	

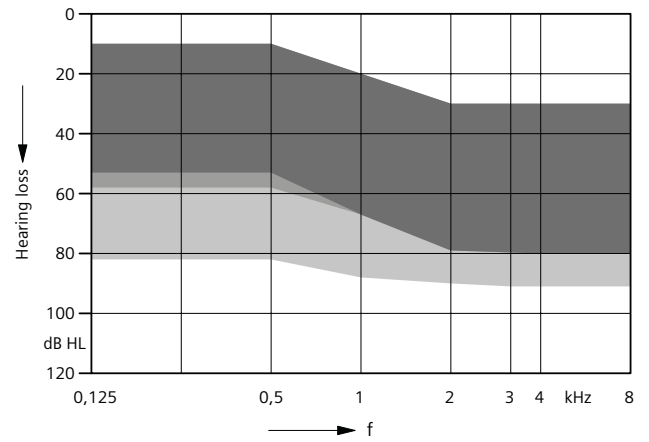
Fitting Range

Intuis 3 S



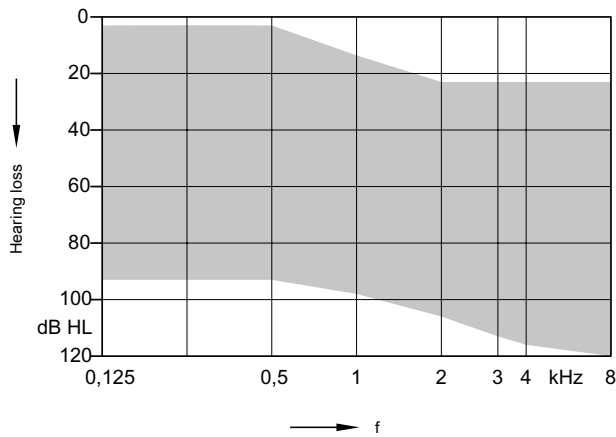
LifeTube open
 + LifeTube double
 + + Earhook damped

Intuis 3 M



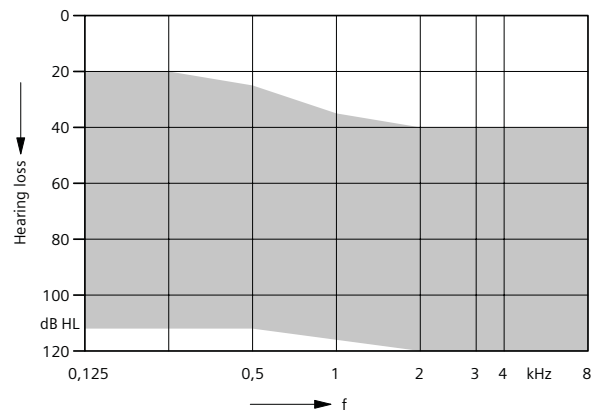
LifeTube open
 + LifeTube double
 + + Earhook damped

Intuis 3 P



Earhook undamped

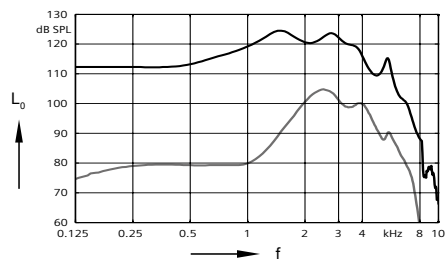
Intuis 3 SP



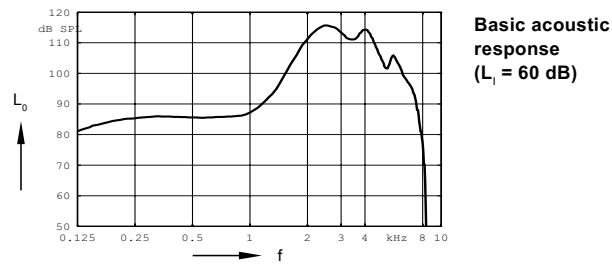
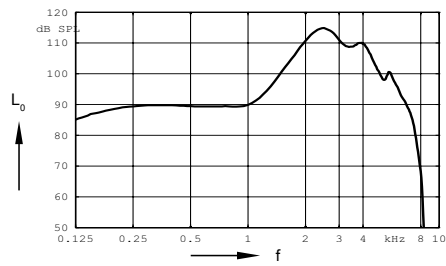
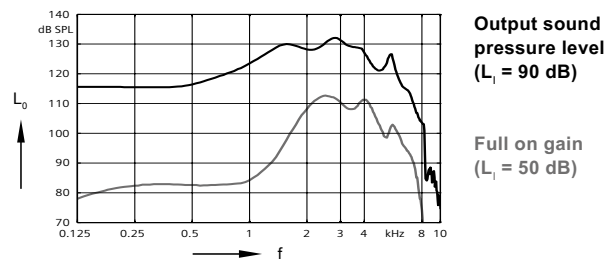
Earhook undamped

Intuis 3 S (Earhook damped) | Basic Data

2 ccm coupler

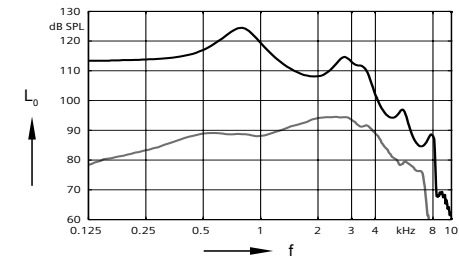


Ear simulator



Intuis 3 S (LifeTube) | Basic Data

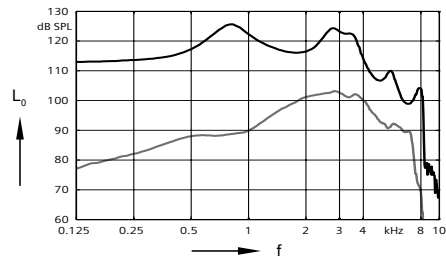
2 ccm coupler



Output sound pressure level
(L_i = 90 dB)

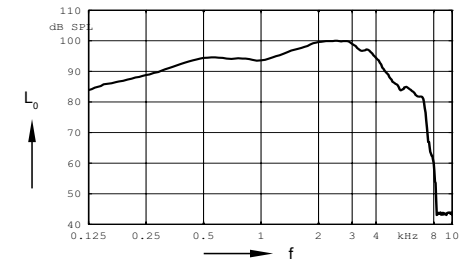
Full on gain
(L_i = 50 dB)

Ear simulator

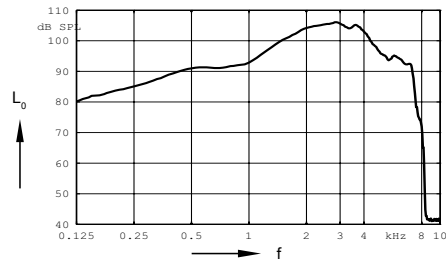


Output sound pressure level
(L_i = 90 dB)

Full on gain
(L_i = 50 dB)



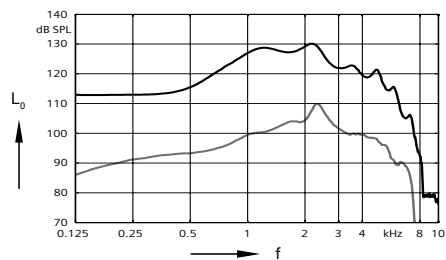
Frequency response
(L_i = 60 dB)



Basic acoustic response
(L_i = 60 dB)

Intuis 3 M (Earhook damped) | Basic Data

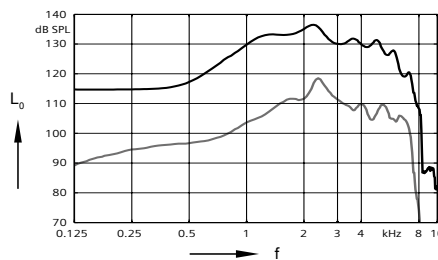
2 ccm coupler



Output sound pressure level
($L_1 = 90$ dB)

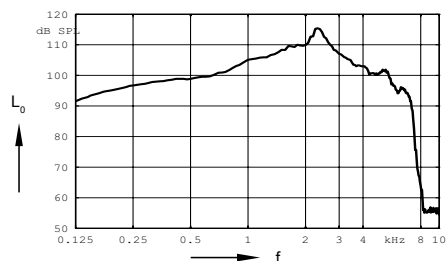
Full on gain
($L_1 = 50$ dB)

Ear simulator

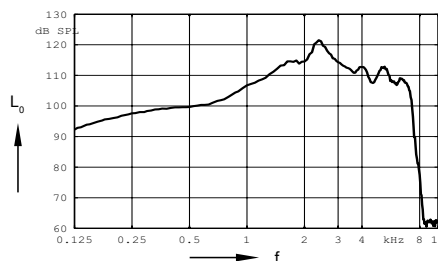


Output sound pressure level
($L_1 = 90$ dB)

Full on gain
($L_1 = 50$ dB)

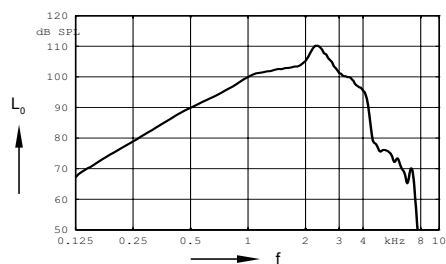


Frequency response
($L_1 = 60$ dB)

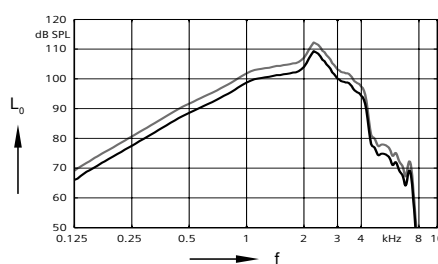


Basic acoustic response
($L_1 = 60$ dB)

Inductive response

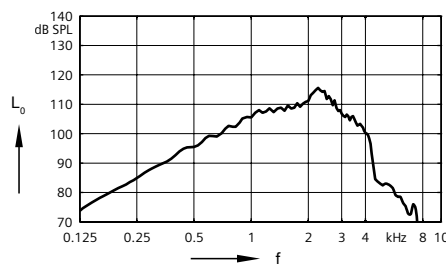


Inductive response
($H = 10$ mA/m)



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

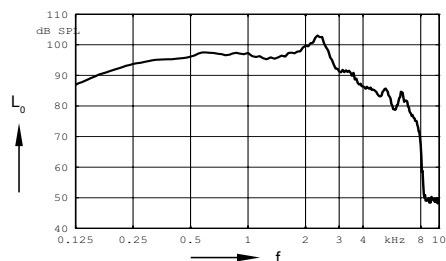
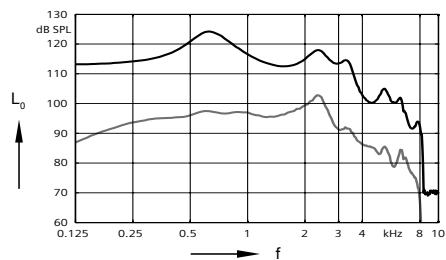
SPLITS curve right
($H = 31.6$ mA/m)



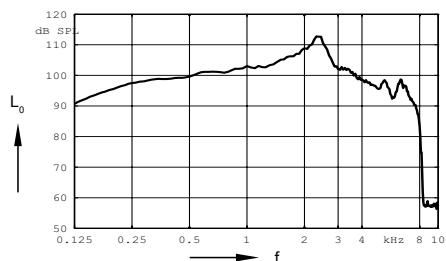
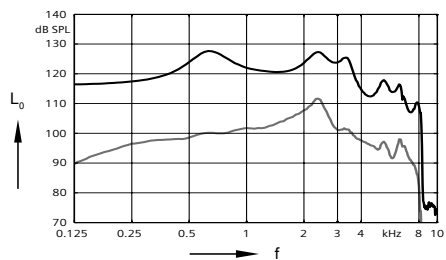
SPLIV curve
($H = 31.6$ mA/m)

Intuis 3 M (LifeTube) | Basic Data

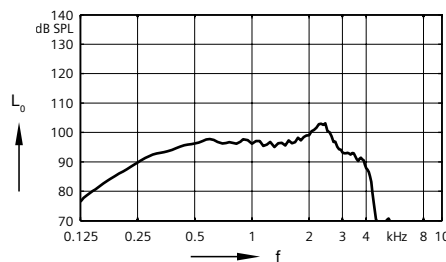
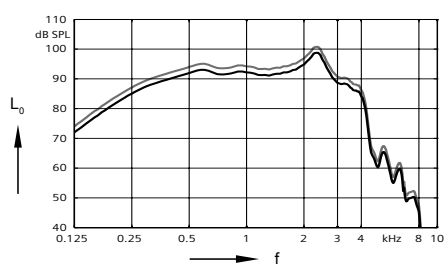
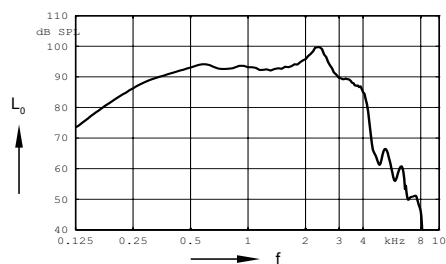
2 ccm coupler



Ear simulator

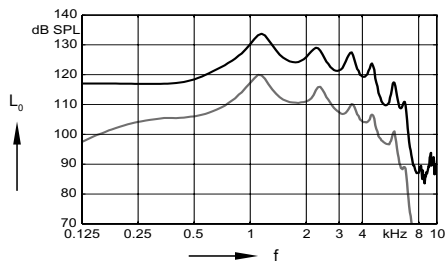


Inductive response



Intuis 3 P (Earhook undamped) | Basic Data

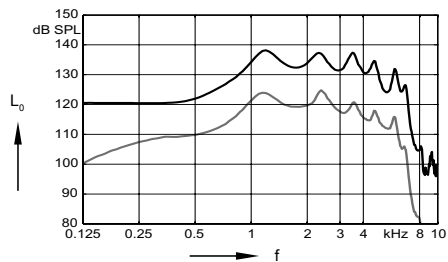
2 ccm coupler



Output sound pressure level
($L_1 = 90$ dB)

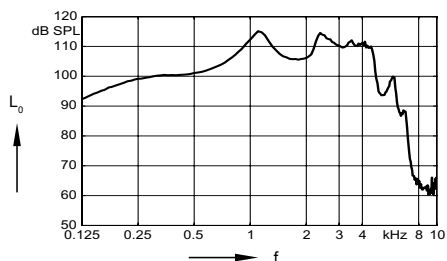
Full on gain
($L_1 = 50$ dB)

Ear simulator

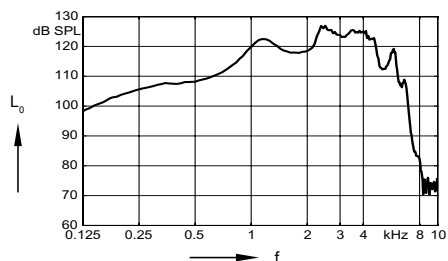


Output sound pressure level
($L_1 = 90$ dB)

Full on gain
($L_1 = 50$ dB)

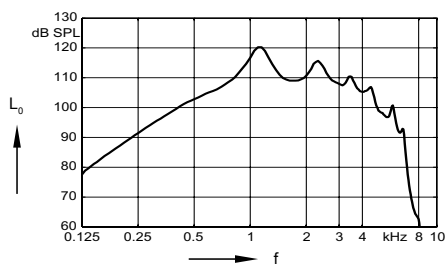


Frequency response
($L_1 = 60$ dB)

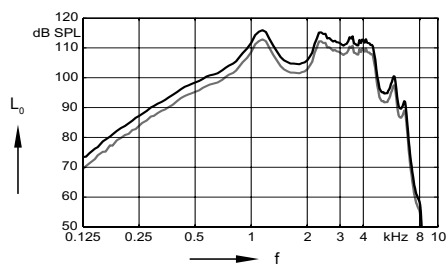


Basic acoustic response
($L_1 = 60$ dB)

Inductive response

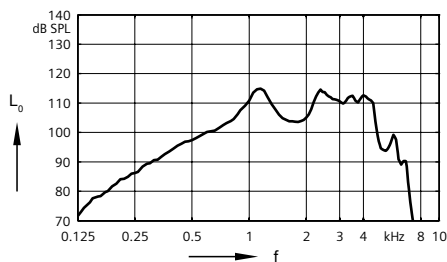


Inductive response
($H = 10$ mA/m)



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

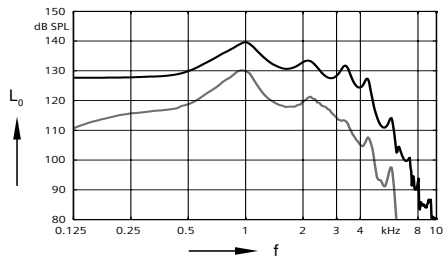
SPLITS curve right
($H = 31.6$ mA/m)



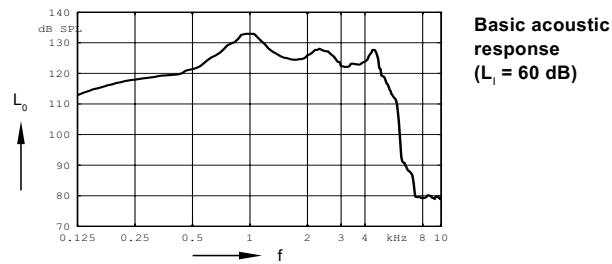
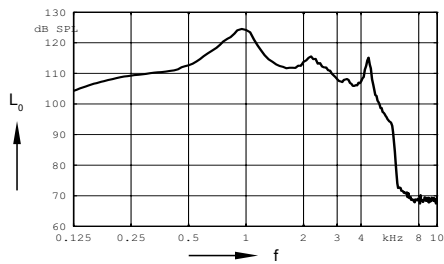
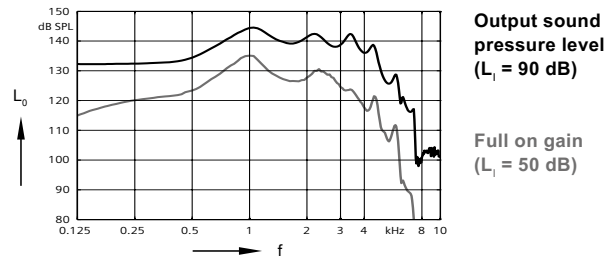
SPLIV curve
($H = 31.6$ mA/m)

Intuis 3 SP (Earhook undamped) | Basic Data

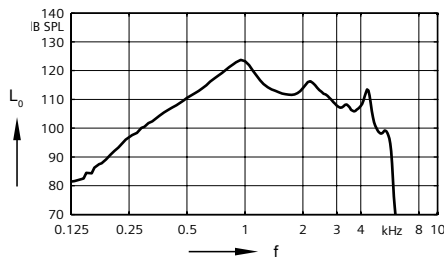
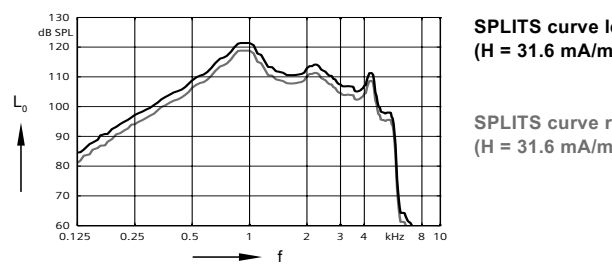
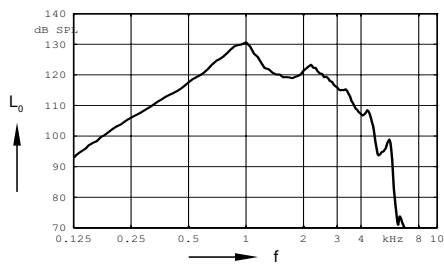
2 ccm coupler



Ear simulator



Inductive response



Intuis 3 | Features and Accessories

	S / M / P / SP
Audiology	
Signal processing (channels) / Gain/MPO (handles)	12 / 6
Hearing programs	4
SpeechMaster	—
HD Music (presets)	—
TwinPhone¹⁾	—
EchoShield	—
Wireless CROS/BICROS²⁾	—
Directionality (channels)	12
Narrow Directionality¹⁾	—
Directional microphone	●
Spatial SpeechFocus¹⁾	—
SpeechFocus	—
TruEar™	—
Frequency compression	—
Extended bandwidth	—
Feedback cancellation	●
eWindScreen binaural¹⁾	—
eWindScreen™ (steps)	—
Noise Reduction (channels / steps)	—
Speech and noise management (steps)	12 / on / off
SoundSmoothing™ (steps)	—
Directional speech enhancement (steps)	—
Adaptive streaming volume³⁾	—
SoundBrilliance™³⁾	—
Sound equalizer (classes)	—
Spatial Configurator¹⁾	—
Span⁴⁾	—
Direction⁵⁾	—
SoundBalance	—
Fitting	
Insitugram	●
Learning (classes) / Data logging	— / ●
Acclimatization manager	—
Tinnitus	
Tinnitus noiser	
Static therapy signal (handles / presets)	—
Ocean Waves therapy signal (presets)	—
Notch therapy	—

Intuis 3 | Features and Accessories

	S	M	P	SP
Style Specific Features				
Ingress Protection Rating	IP67	IP67	—	—
Telecoil	—	●	●	●
AutoPhone™	—	—	—	—
Charging contacts	—	—	—	—
Battery Size	312	13	13	675
Battery door on/off function	●	●	●	●
Nanocoated housing	●	●	●	●
e2e wireless™ 3.0	—	—	—	—
Audio streaming	—	—	—	—
User controls coupling via e2e	—	—	—	—
Wireless programming	—	—	—	—
Instrument configurations				
Flat cover	—	—	—	—
Push button	●	—	●	●
Rocker switch	—	●	●	●
Color conversion kit	○	○	—	—
Battery door – direct audio input	—	○	○	○
Battery door – child lock	—	—	—	—
Tamperproof battery door	—	○	—	—
Small earhook	○	○	—	○
Programming Accessories				
ConnexxLink, ConnexxLink™	—	—	—	—
Programming adapter / cable	size 312	size 13	Programming shoe / CS44	Programming shoe / CS44
Accessories				
miniPocket	○	○	○	○
CROS Pure	—	—	—	—
eCharger	—	—	—	—
easyPocket™	—	—	—	—
easyTek	—	—	—	—
TV Transmitter (req. 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

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
SPLIV	SPL In a Vertical magnetic field
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 S3.22-2014 and IEC 60118-7:2005 if applicable.
- ▶ All measurements with an ear simulator were performed according to IEC 118-0/A1:1994 and to DIN 45605 (frequency range) if applicable.
- ▶ Tinnitus noiser 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:
 - LifeTube
 - Earhook

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.