

# **Insio C&G AX**

## **Technical Data**

Made for **ばiPhone** | iPad | iPod 7AX 5AX 3AX

#### **ITC**

#### 113/50

- 50 dB / 113 dB SPL (2 ccm coupler)
- 61 dB / 125 dB SPL (Ear simulator)

#### 118/55

- 55 dB / 118 dB SPL (2 ccm coupler)
- 66 dB / 128 dB SPL (Ear simulator)

#### 124/65

- 65 dB / 124 dB SPL (2 ccm coupler)
- 75 dB / 135 dB SPL (Ear simulator)

#### ITE

#### 118/55

- 55 dB / 118 dB SPL (2 ccm coupler)
- 67 dB / 129 dB SPL (Ear simulator)

#### 124/65

- 65 dB / 124 dB SPL (2 ccm coupler)
- 75 dB / 135 dB SPL (Ear simulator)

# Insio C&G AX – ITC | Technical Data

Туре	113/50		118/55		124/65	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level						
OSPL 90 at 1.6 kHz	_	118 dB SPL	_	118 dB SPL	_	128 dB SPL
OSPL 90 (Peak)	113 dB SPL	125 dB SPL	118 dB SPL	128 dB SPL	124 dB SPL	135 dB SPL
HFA-OSPL 90	109 dB SPL	_	109 dB SPL	_	119 dB SPL	_
Gain						
FOG at 1.6 kHz	_	54 dB	_	52 dB	_	67 dB
FOG (peak)	50 dB	61 dB	55 dB	66 dB	65 dB	75 dB
HFA-FOG	46 dB	-	44 dB	-	60 dB	_
Reference test gain	31 dB	43 dB	32 dB	43 dB	43 dB	52 dB
Frequency, noise and directivity						
Frequency range 7AX 5AX / 3AX		140-10600 Hz 140-8300 Hz			100 – 6700 Hz 100 – 6700 Hz	
Equivalent input noise	18 dB SPL	18 dB SPL	18 dB SPL	18 dB SPL	18 dB SPL	18 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1/2/1/1%	3 / 5 / 4 / – %	1/1/1/1%	2/2/2/-%	2/3/1/1%	7/9/3/-%
Tinnitus Function broadband	68 dB SPL	_	75 dB SPL	_	80 dB SPL	_
Al-DI	4.9 dB		4.9 dB		4.6 dB	
Inductive coil sensitivity						
MASL (1 mA/m) at 1.6 kHz	_	-	_	_	_	_
HFA MASL (1 mA/m)	_	_	_	_	_	<del>-</del>
HFA SPLITS (left/right)	_	_	_	_	_	_
RSETS (left/right)	_	_	_	_	_	_
HFA SPLIV	_	_	_	_	_	_
Battery						
Battery runtime (without streaming)	up to 28 h		up to 28 h		up to 28 h	
Battery runtime (incl. 5 h streaming)	up to 24 h		up to 24 h		up to 24 h	
<b>Cellphone Compatibility</b>						
Microphone mode	0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz	
Telecoil mode	-	-	-	_	-	_

Please find additional information to the values on page "Further information".

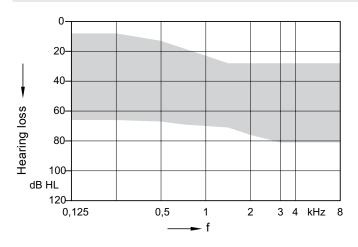
# Insio C&G AX – ITE | Technical Data

Туре	118	/ 55	124/65		
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator	
Output sound pressure level					
OSPL 90 at 1.6 kHz	-	119 dB SPL	-	128 dB SPL	
OSPL 90 (Peak)	118 dB SPL	129 dB SPL	124 dB SPL	135 dB SPL	
HFA-OSPL 90	109 dB SPL	_	120 dB SPL	_	
Gain					
FOG at 1.6 kHz	-	56 dB	-	67 dB	
FOG (peak)	55 dB	67 dB	65 dB	75 dB	
HFA-FOG	47 dB	_	60 dB	-	
Reference test gain	33 dB	43 dB	43 dB	53 dB	
Frequency, noise and directivity					
Frequency range 7AX 5AX / 3AX	100 – 8300 Hz 100 – 8200 Hz	100 – 10600 Hz 100 – 8300 Hz	100 – 6100 Hz 100 – 6100 Hz	100 – 6300 Hz 100 – 6300 Hz	
Equivalent input noise	18 dB SPL	18 dB SPL	18 dB SPL	18 dB SPL	
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1/1/1/1%	2/2/2/-%	1/2/1/1%	6/6/2/-%	
Tinnitus Function broadband	75 dB SPL	_	80 dB SPL	_	
AI-DI	4.9 dB		4.9 dB		
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 runtime (without streaming)	up to 28 h		up to 28 h		
Battery runtime (incl. 5 h streaming)	up to	24 h	up to 24 h		
Cellphone Compatibility					
Microphone mode	0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz		
Telecoil mode		_	-		

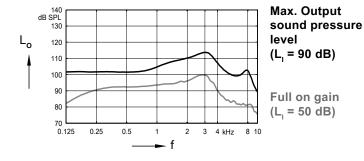
Please find additional information to the values on page "Further information".

# Insio C&G AX - ITC | Basic Data

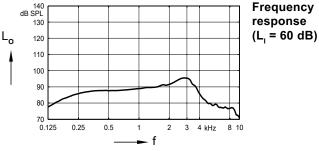
## 113/50



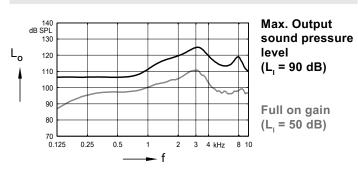
## 2 ccm coupler

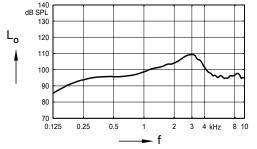


# Frequency



### Ear simulator

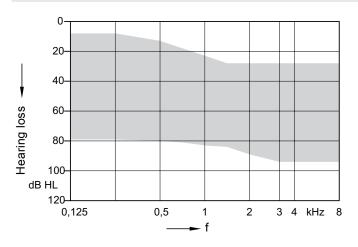




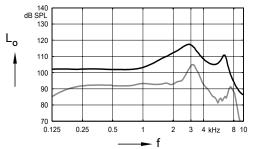
**Basic acoustic** response  $(L_i = 60 dB)$ 

# Insio C&G AX - ITC | Basic Data

## 118/55



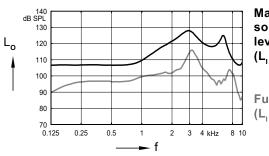
## 2 ccm coupler



Max. Output sound pressure level  $(L_{i} = 90 \text{ dB})$ 

Full on gain  $(L_1 = 50 \text{ dB})$ 

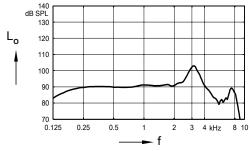
#### Ear simulator



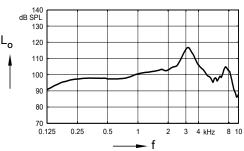
Max. Output sound pressure level

 $(L_1 = 90 dB)$ 

Full on gain  $(L_1 = 50 \text{ dB})$ 



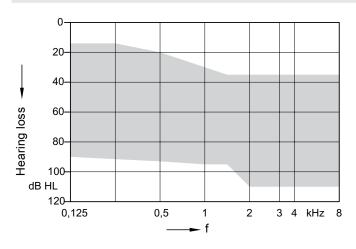
Frequency response  $(L_i = 60 dB)$ 



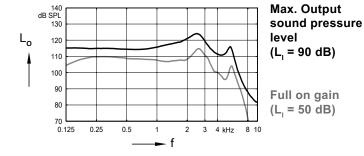
**Basic acoustic** response  $(L_i = 60 dB)$ 

# Insio C&G AX - ITC | Basic Data

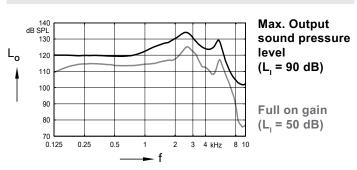
### 124/65

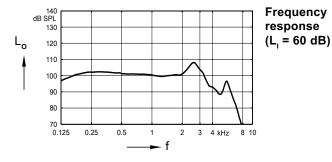


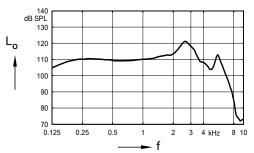
## 2 ccm coupler



### Ear simulator



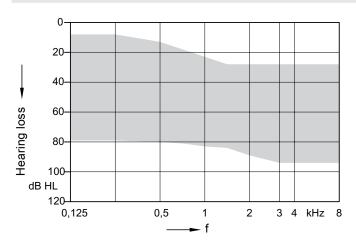




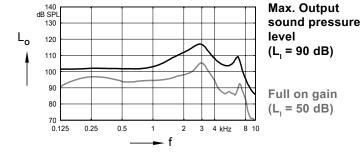
**Basic acoustic** response  $(L_i = 60 dB)$ 

## Insio C&G AX - ITE | Basic Data

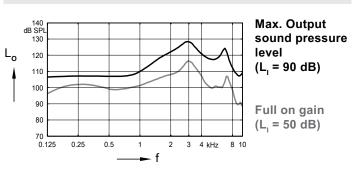
## 118/55

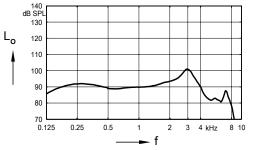


## 2 ccm coupler

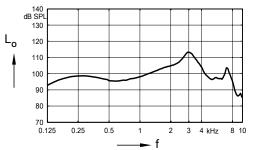


### Ear simulator





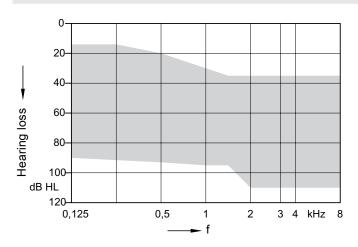
Frequency response  $(L_i = 60 dB)$ 



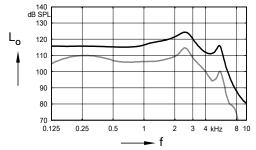
**Basic acoustic** response  $(L_i = 60 dB)$ 

## Insio C&G AX - ITE | Basic Data

### 124/65



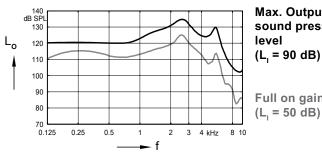
## 2 ccm coupler



Max. Output sound pressure level  $(L_1 = 90 \text{ dB})$ 

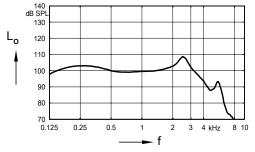
Full on gain  $(L_1 = 50 \text{ dB})$ 

#### Ear simulator

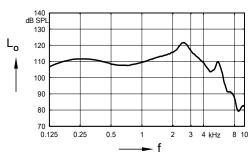


Max. Output sound pressure level  $(L_1 = 90 dB)$ 

Full on gain



Frequency response  $(L_i = 60 dB)$ 



**Basic acoustic** response  $(L_i = 60 dB)$ 

# Insio C&G AX | Features and Accessories

	7AX	5AX	3AX
Dynamic Soundscape Processing 2.0			
Augmented Focus	✓	✓	✓
Acoustic Sensor	✓	✓	✓
Motion Sensor	✓	✓	✓
OVP (Own Voice Processing) 1)	_	_	_
Sound Clarity			
Signal processing (channels) / Gain&MPO (handles)	48 / 20	32 / 16	24 / 12
Hearing programs	6	6	6
Extended dynamic range	✓	✓	✓
Speech and noise management	✓	✓	✓
SoundSmoothing	✓	✓	✓
Feedback cancellation	✓	✓	✓
HD Music (presets)	3	3	1
eWindScreen	✓	✓	✓
Extended bandwidth	✓	<del>_</del>	_
EchoShield	✓	✓	_
Speech Quality			
Binaural Directionality	✓	✓	✓
Wireless CROS/BICROS	✓	✓	✓
Frequency compression	✓	✓	✓
Spatial SpeechFocus <sup>1) 2)</sup>	✓	✓	_
Wearer Interaction			
Signia Assistant	✓	✓	✓
Signia App (iOS and Android)	✓	✓	✓
Adaptive Streaming Volume <sup>3)</sup>	✓	✓	✓
Spatial Configurator	✓	✓	_
Direct Streaming	✓	✓	✓
Android devices (ASHA)	✓	✓	✓
Made for iPhone   iPad   iPod	✓	✓	✓
Tinnitus	✓	✓	✓
Notched Amplification Therapy	✓	✓	✓
Tinnitus noise therapy signal	✓	✓	✓
Fitting	✓	✓	✓
Smart Optimizer and Data Logging	✓	✓	✓
Acclimatization manager	✓	✓	✓
InSituGram	✓	✓	✓
AutoFit	✓	✓	✓
TeleCare	✓	✓	✓
Remote Services	✓	✓	✓
Signia App	✓	✓	✓

<sup>1)</sup> req. bilateral fitting

highest feature performance ✓ available — not available O optional

<sup>&</sup>lt;sup>2)</sup> for 5AX, right/left directionality available only in Stroll Program and via the Spatial Configurator

<sup>3)</sup> streaming only

# Insio C&G AX | Features and Accessories

Style specific features			
Ingress Protection Rating	IP68		
Charging contacts	_		
Battery size	_		
Battery door on/off function	_		
Nanocoated housing	<del>_</del>		
e2e wireless 4.0	<b>√</b>		
User controls coupling via e2e	<b>√</b>		
Wireless programming	<b>√</b>		
Instrument configurations			
Flat cover	_		
Rotary volume control	_		
Push button	<b>√</b>		
Rocker switch	<del>_</del>		
Color conversion kit	_		
Color conversion kit with T-Coil	_		
T-Coil	_		
Battery door – child lock	_		
Small earhook	_		
Programming accessories			
ConnexxAir / ConnexxLink	—/—		
Noahlink Wireless	Mandatory		
Programming adapter / cable	_		
Accessories			
miniPocket	0		
StreamLine TV	0		
StreamLine Mic	0		
Insio Charger	Mandatory		
CROS Pure C&G AX	0		
CROS Pure 312 AX	0		
CROS Styletto AX	_		

 $\checkmark$  available — not available O optional

### Insio C&G AX | Further information

#### **Abbreviations**

The following abbreviations are used in this datasheet:

SPL Sound Pressure Level

**OSPL** Output Sound Pressure Level **HFA** High Frequency Average

**FOG** Full-On Gain

MASI 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 ASHA Audio streaming for hearing aids

#### Standards and additional information

- ▶ All measurements with the 2 ccm coupler were performed according to ANSI S3.22-2014 and IEC 60118-0:2015 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.
- ▶ All Cellphone Compatibility measurements were performed according to IEC 60118-13:2019, EN IEC 60118-13:2020 and ANSI C63.19-2019.
- Cellphone Compatibility definition: It is expected that the hearing aid user can effectively use a compliant wireless device held in a talking position at the ear. Maximum achievable Cellphone Compatibility range: 0.65-0.96 GHz and 1.4-2.7 GHz.
- Curves and figures representing FOG are measured with 20 dB reduction and 70 dB SPL input level.
- ▶ Figures representing Equivalent Input Noise incorporate a moderate expansion.
- 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.
- Inductive coil sensitivity values, inductive response curves and T ratings apply for instruments with telecoil only.
- ▶ The current consumption is measured in reference test setting (RTS) according to the applicable standards. Due to the settling behaviour of hearing aids supporting RF (radio frequency), the battery current is measured 3 minutes after turning on (note: no pairing).
- ▶ The battery runtime is based on first fit settings using 60 % of the fitting range and an ISTS (International Speech Test Signal) input signal at 65 dB SPL (note: pairing established). The actual battery runtime is determined by battery quality, hearing loss, sound environment, usage and activated feature set. Regarding RF usage (Bluetooth streaming) two different conditions are considered.
- Extended bandwidth up to 12 kHz for 7AX devices only.

#### Special note for instruments with built-in lithium-ion rechargeable battery

▶ The runtime of all lithium-ion rechargeable batteries reduces over time. The estimates are based on fresh lithium-ion rechargeable battery capacity. Under normal operating conditions, the battery will retain up to 80 % of its initial capacity after 2 years of use. Please note that battery performance will vary depending on individual usage patterns and environmental conditions.

**≰**iPhone | iPad | iPod

"Made for iPhone", "Made for iPad", and "Made for iPod" mean that an electronic accessory has been designed to connect specifically to iPhone, iPad, or iPod, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone, iPad, or iPod may affect wireless performance.

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.

Legal Manufacturer

WSAUD A/S Nymøllevej 6 3540 Lynge Denmark

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Subject to change without prior notice



## **⚠** WARNING

Choking hazard posed by small parts.

▶ This instrument is not intended for the fitting of infants, children under 3 years or persons of mental incapacity.



### **⚠** WARNING

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.