

## NITRO 3MI ITE, ITC, CIC Dijital programlanabilir işitme cihazı

ITE	ITC	CIC
 71 dB/130 dB SPL	 71 dB/130 dB SPL	 <b>71 dB/130 dB SPL</b>
24 kanallı 48 bantlı (12 frekans bandı, 36 kompresyon bandı)		
PC Yüksek frekansta maksimum çıkış	PC Yüksek frekansta maksimum çıkış	PC Yüksek frekansta maksimum çıkış
MPO Düşük frekansta maksimum çıkış	MPO Düşük frekansta maksimum çıkış	MPO Düşük frekansta maksimum çıkış
TC Tını kontrol	TC Tını kontrol	TC Tını kontrol
AGC Otomatik Kazanç Kontrol	AGC Otomatik Kazanç Kontrol	AGC Otomatik Kazanç Kontrol
Frekans baskılama	Frekans baskılama	Frekans baskılama
Feedback yönetimi	Feedback yönetimi	Feedback yönetimi
Micon konuşma ve gürültü yönetimi	Micon konuşma ve gürültü yönetimi	Micon konuşma ve gürültü yönetimi
Micon rüzgar kalkanı	Micon rüzgar kalkanı	Micon rüzgar kalkanı
Tinnitus maskeleyme (12 kanal)	Tinnitus maskeleyme (12 kanal)	Tinnitus maskeleyme (12 kanal)
Micon öğrenme (1 konum)	Micon öğrenme (1 konum)	Micon öğrenme (1 konum)
Gürültü azaltma	Gürültü azaltma	Gürültü azaltma
VC ses kontrol (manuel)	VC ses kontrol (manuel)	VC ses kontrol (manuel)
Uyarı tonları (pil,program,açık/kapalı)	Uyarı tonları (pil,program,açık/kapalı)	Uyarı tonları (pil,program,açık/kapalı)
Çift mikrofon	Çift mikrofon	Tek mikrofon
Tercihli özellikler		
Ses değişim düğmesi	Ses değişim düğmesi	Ses değişim düğmesi
Program değişimi	Program değişimi	Program değişimi
Tek™	Tek™	Tek™
MiniTek™	MiniTek™	MiniTek™
ProPocket™	ProPocket™	ProPocket™
easyPocket™	easyPocket™	easyPocket™
EPen™	EPen™	EPen™
ConnexxLink™	ConnexxLink™	ConnexxLink™
Otofon	Otofon	-
Telecoil	Telecoil	-
e2e wireless	e2e wireless	-
Yönsel konuşma geliştirici	Yönsel konuşma geliştirici	-

# Technical Data

## Nitro™ micon Custom



7mi

3mi

### CIC

118 / 55

- 67 dB / 128 dB SPL (ear simulator)
- 55 dB / 118 dB SPL (2 ccm coupler)

130 / 71

- 79 dB / 138 dB SPL (ear simulator)
- 71 dB / 130 dB SPL (2 ccm coupler)

### ITC - HS

118 / 55

- 65 dB / 128 dB SPL (ear simulator)
- 55 dB / 118 dB SPL (2 ccm coupler)

130 / 71

- 79 dB / 137 dB SPL (ear simulator)
- 71 dB / 130 dB SPL (2 ccm coupler)

### ITE

123 / 60

- 69 dB / 132 dB SPL (ear simulator)
- 60 dB / 123 dB SPL (2 ccm coupler)

130 / 71

- 80 dB / 137 dB SPL (ear simulator)
- 71 dB / 130 dB SPL (2 ccm coupler)

### Key Features

- High amplification even in discreet size
- Full wireless connectivity
- micon BestSound™ Technology

## Data Sheet

# Nitro micon CIC · Technical Data

Type	118 / 55		130 / 71	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	–	118 dB SPL	–	137 dB SPL
Peak	118 dB SPL	128 dB SPL	130 dB SPL	138 dB SPL
HFA-OSPL 90	111 dB SPL	–	122 dB SPL	–
Gain				
Full-on gain (FOG) at 1.6 kHz	–	53 dB	–	78 dB
Full-on gain (Peak)	55 dB	67 dB	71 dB	79 dB
HFA-FOG	43 dB	–	65 dB	–
Reference test gain	34 dB	43 dB	45 dB	62 dB
Frequency, noise and directivity				
Frequency range 7mi 3mi	100 - 8500 Hz 100 - 8100 Hz	110 - 10600 Hz 110 - 8300 Hz	100 - 6000 Hz 100 - 6000 Hz	190 - 5500 Hz 190 - 5500 Hz
Equivalent input noise	24 dB	24 dB	21 dB	21 dB
Total harmonic distortion at 500 / 800 / 1600 Hz	1 / 1 / 1 %	1 / 2 / 1 %	1 / 1 / 1 %	1 / 1 / 1 %
AI-DI	–		–	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	–	–	–
HFA MASL (1 mA/m)	–	–	–	–
HFA SPLITS (left/right)	–	–	–	–
RSETS (left/right)	–	–	–	–
AGC-O (fully activated)				
Attack / release Time	3 / 90 ms	–	3 / 100 ms	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	1.0 mA		1.0 mA	
Battery life (cell zinc air) Type 10	~ 70 h		~ 70 h	
IRIL IEC 118-13:2011 (bystander)				
800 - 960 MHz	< - 39 dB SPL		< - 39 dB SPL	
1400 - 2000 MHz	< - 26 dB SPL		< - 26 dB SPL	
ANSI C63.19	M4 / –		M4 / –	

# Nitro micon ITC - HS · Technical Data

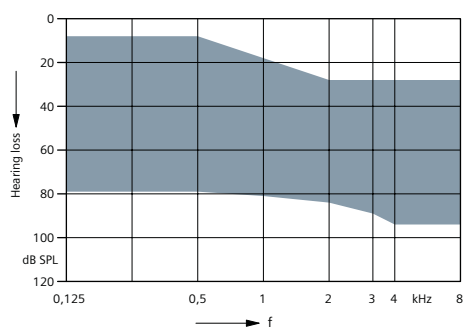
Type	118 / 55		130 / 71	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	–	119 dB SPL	–	137 dB SPL
Peak	118 dB SPL	128 dB SPL	130 dB SPL	137 dB SPL
HFA-OSPL 90	111 dB SPL	–	125 dB SPL	–
Gain				
Full-on gain (FOG) at 1.6 kHz	–	53 dB	–	78 dB
Full-on gain (Peak)	55 dB	65 dB	71 dB	79 dB
HFA-FOG	46 dB	–	64 dB	–
Reference test gain	34 dB	44 dB	48 dB	62 dB
Frequency, noise and directivity				
Frequency range 7mi 3mi	100 - 7800 Hz 100 - 7800 Hz	120 - 7800 Hz 120 - 7800 Hz	100 - 5900 Hz 100 - 5900 Hz	190 - 5400 Hz 190 - 5400 Hz
Equivalent input noise	20 dB	20 dB	24 dB	24 dB
Total harmonic distortion at 500 / 800 / 1600 Hz	2 / 2 / 2 %	2 / 3 / 2 %	3 / 2 / 1 %	4 / 2 / 1 %
AI-DI	4.8 dB		4.8 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	82 dB	–	109 dB
HFA MASL (1 mA/m)	75 dB	–	94 dB	–
HFA SPLITS (left/right)	93 / 93 dB	–	106 / 106 dB	–
RSETS (left/right)	-1 / -1 dB	–	-2 / -2 dB	–
AGC-O (fully activated)				
Attack / release Time	3 / 90 ms	–	3 / 100 ms	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	1.0 mA		1.2 mA	
Battery life (cell zinc air) Type 10 / 312	~ 70 h / ~ 120 h		~ 60 h / ~ 100 h	
IRIL IEC 118-13:2011 (bystander)				
800 - 960 MHz	< - 37 dB SPL		< - 37 dB SPL	
1400 - 2000 MHz	< - 18 dB SPL		< - 18 dB SPL	
ANSI C63.19	M4 / T2		M4 / T2	

# Nitro micon ITE · Technical Data

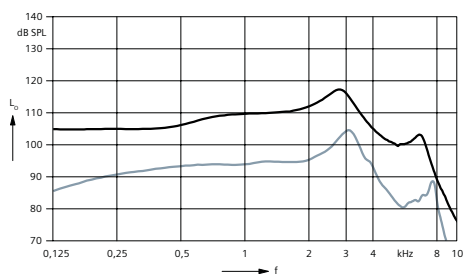
Type	123 / 60		130 / 71	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
at 1.6 kHz	–	127 dB SPL	–	136 dB SPL
Peak	123 dB SPL	132 dB SPL	130 dB SPL	137 dB SPL
HFA-OSPL 90	118 dB SPL	–	124 dB SPL	–
Gain				
Full-on gain (FOG) at 1.6 kHz	–	62 dB	–	80 dB
Full-on gain (Peak)	60 dB	69 dB	71 dB	80 dB
HFA-FOG	54 dB	–	63 dB	–
Reference test gain	41 dB	52 dB	48 dB	61 dB
Frequency, noise and directivity				
Frequency range 7mi 3mi	100 - 6000 Hz 100 - 6000 Hz	120 - 6000 Hz 120 - 6000 Hz	100 - 5900 Hz 100 - 5900 Hz	630 - 5400 Hz 630 - 5400 Hz
Equivalent input noise	19 dB	19 dB	21 dB	21 dB
Total harmonic distortion at 500 / 800 / 1600 Hz	2 / 2 / 2 %	3 / 4 / 3 %	2 / 2 / 1 %	3 / 2 / 1 %
AI-DI	5.2 dB		5.2 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	92 dB	–	110 dB
HFA MASL (1 mA/m)	84 dB	–	93 dB	–
HFA SPLITS (left/right)	100 / 100 dB	–	106 / 106 dB	–
RSETS (left/right)	-1 / -1 dB	–	-2 / -2 dB	–
AGC-O (fully activated)				
Attack / release Time	3 / 90 ms	–	3 / 90 ms	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	1.0 mA		1.2 mA	
Battery life (cell zinc air) Type 13 / 312	~ 220 h / ~ 120 h		~ 190 h / ~ 100 h	
IRIL IEC 118-13:2011 (bystander)				
800 - 960 MHz	< - 34 dB SPL		< - 34 dB SPL	
1400 - 2000 MHz	< - 24 dB SPL		< - 24 dB SPL	
ANSI C63.19	M4 / T2		M4 / T2	

# Nitro micon CIC · Basic Data

118 / 55

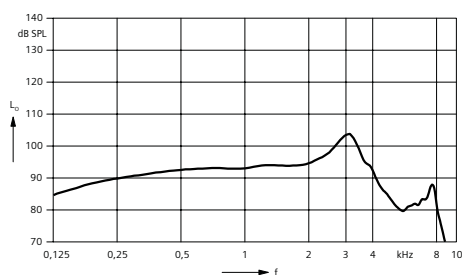


## 2 ccm coupler



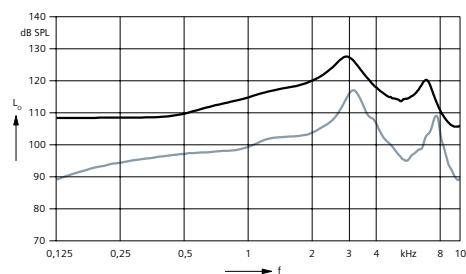
Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)



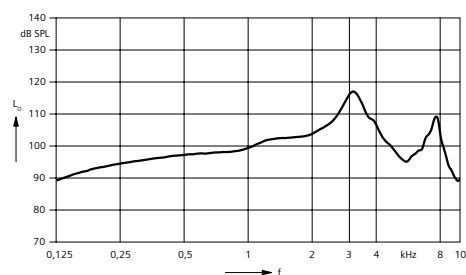
Frequency response  
( $L_1 = 60$  dB)

## Ear simulator



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

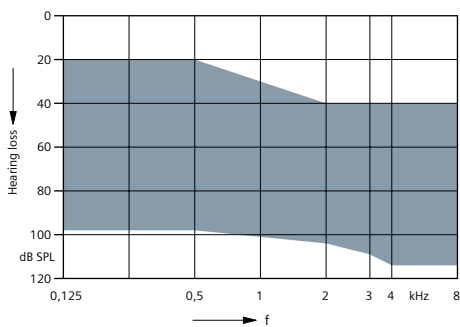
Full on gain  
( $L_1 = 50$  dB)



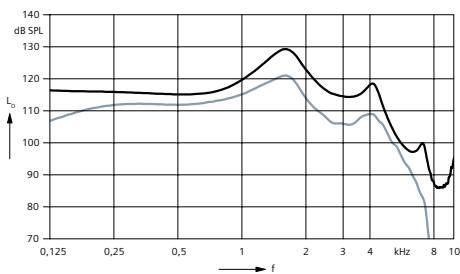
Basic acoustic response  
( $L_1 = 60$  dB)

# Nitro micon CIC · Basic Data

130 / 71

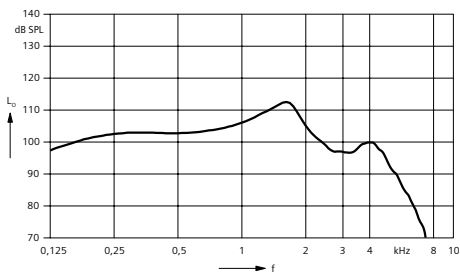


2 ccm coupler



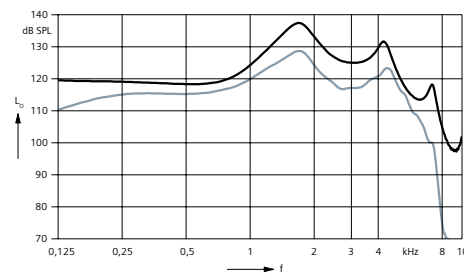
Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)



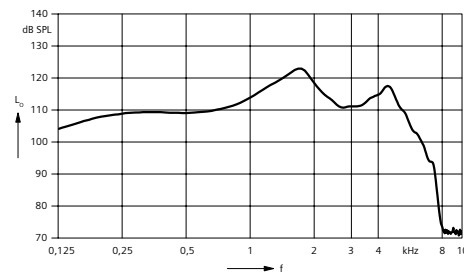
Frequency response  
( $L_1 = 60$  dB)

Ear simulator



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

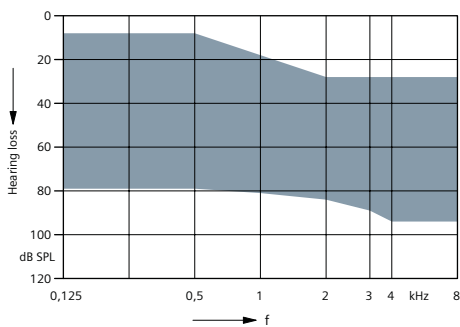
Full on gain  
( $L_1 = 50$  dB)



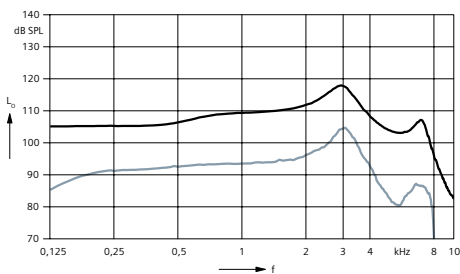
Basic acoustic response  
( $L_1 = 60$  dB)

# Nitro micon ITC - HS · Basic Data

118 / 55

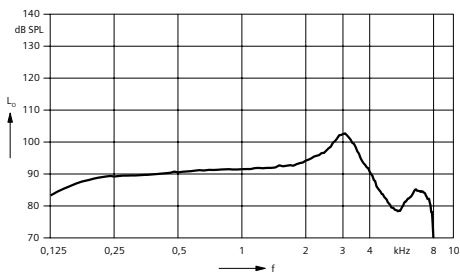


## 2 ccm coupler



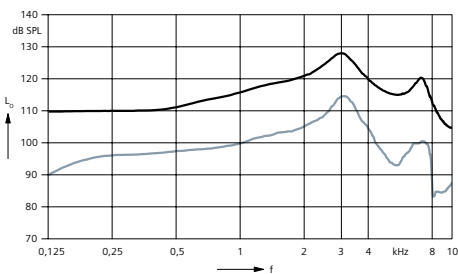
Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)



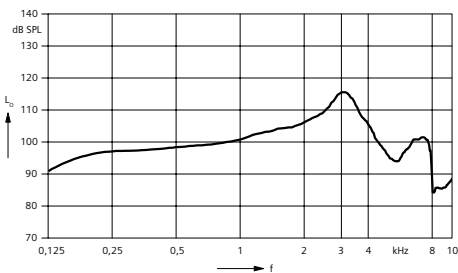
Frequency response  
( $L_1 = 60$  dB)

## Ear simulator



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

Full on gain  
( $L_1 = 50$  dB)

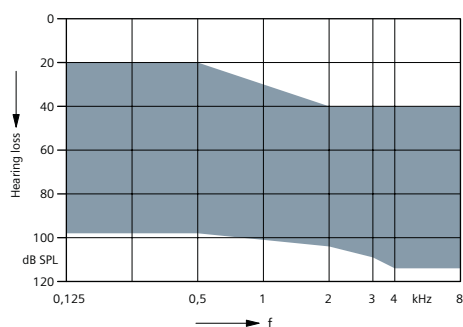


Basic acoustic response  
( $L_1 = 60$  dB)

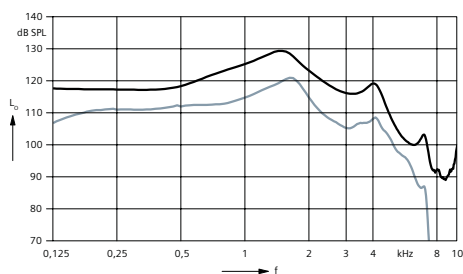


# Nitro micon ITC - HS · Basic Data

130 / 71

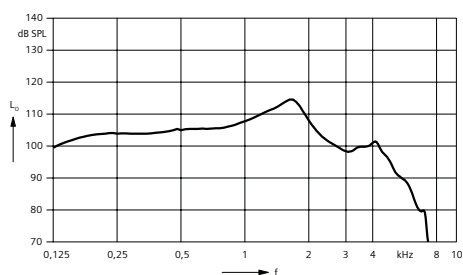


## 2 ccm coupler



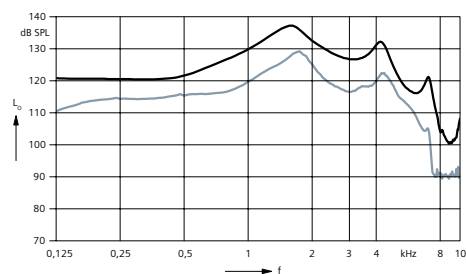
Output sound pressure level  
( $L_p = 90$  dB)

Full on gain  
( $L_p = 50$  dB)



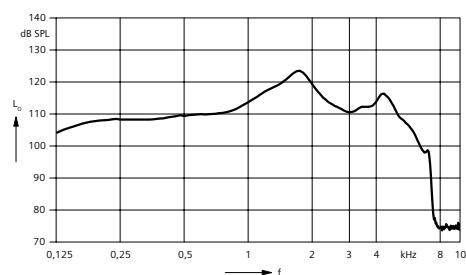
Frequency response  
( $L_p = 60$  dB)

## Ear simulator



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

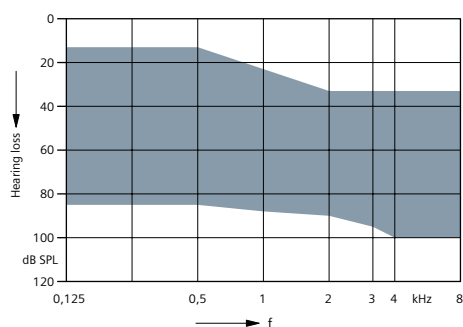
Full on gain  
( $L_p = 50$  dB)



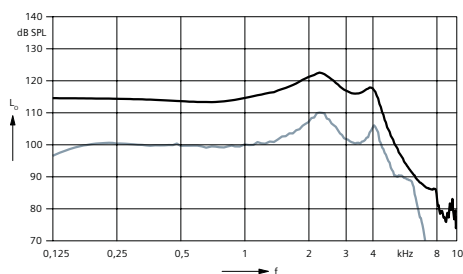
Basic acoustic response  
( $L_p = 60$  dB)

# Nitro micon ITE · Basic Data

123 / 60

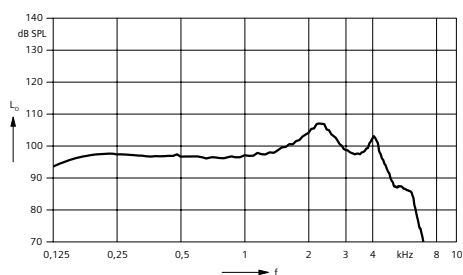


## 2 ccm coupler



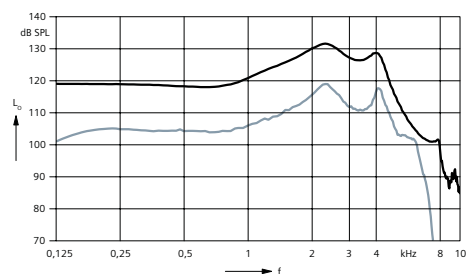
Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)



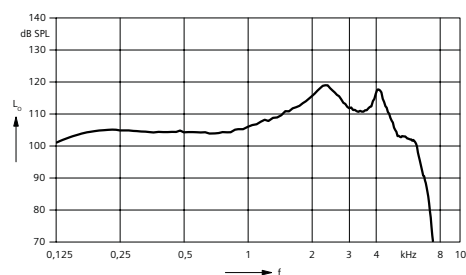
Frequency response  
( $L_i = 60$  dB)

## Ear simulator



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

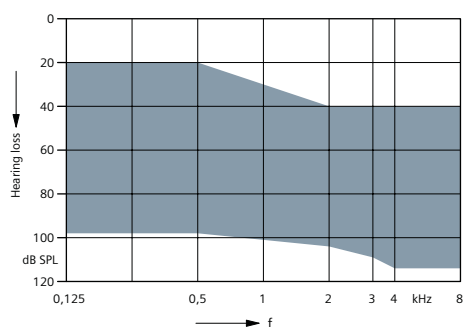
Full on gain  
( $L_i = 50$  dB)



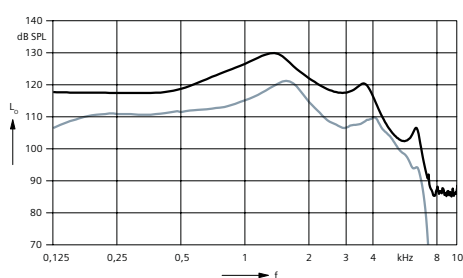
Basic acoustic response  
( $L_i = 60$  dB)

# Nitro micon ITE · Basic Data

130 / 71

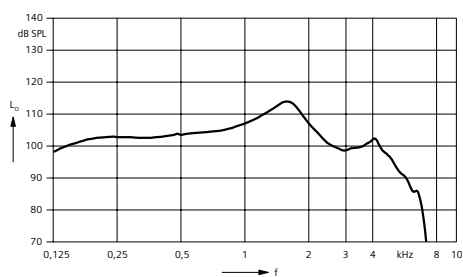


2 ccm coupler



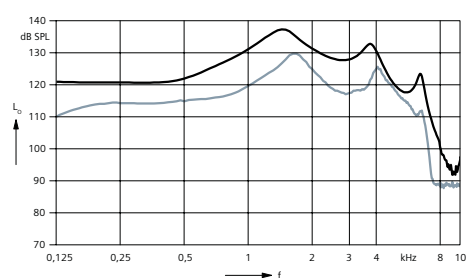
Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)



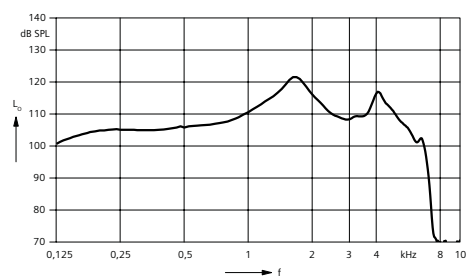
Frequency response  
( $L_1 = 60$  dB)

Ear simulator



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

Full on gain  
( $L_1 = 50$  dB)



Basic acoustic response  
( $L_1 = 60$  dB)

## Features and Accessories

Audiological Features	CIC			
	118 / 55 7mi	3mi	130 / 71 7mi	3mi
<b>miFocus</b>				
High res. adaptive TwinMic System™ (availability / channels)	— / —	— / —	— / —	— / —
Directional speech enhancement	—	—	—	—
High res. SpeechFocus / automatic	— / —	— / —	— / —	— / —
Frequency compression	●	●	●	●
<b>miSound</b>				
Feedback cancellation	●	●	●	●
micon Speech and Noise Management (steps)	7	3	7	3
micon Sound Smoothing™ (steps)	3	on / off	3	on / off
micon eWindScreen™ (steps)	3	on / off	3	on / off
micon SoundBrilliance™ (steps)	3	—	3	—
Tinnitus noiser (channels)	20	12	20	12
<b>miGuide</b>				
Sound equalizer (classes)	6	—	6	—
micon Learning (classes)	6	1	6	1
Data logging	●	●	●	●
micon fit	●	●	●	●
Acclimatization manager	●	—	●	—
<b>Basic Features</b>				
Number of channels / handles	48 / 20	24 / 12	48 / 20	24 / 12
Extended bandwidth	●	—	●	—
T-Coil	—		—	
AutoPhone™	—		—	
Battery size	10		10	
Battery door on/off function	●		●	
e2e wireless™ 2.0	○		—	
Audio streaming	○		—	
User controls coupling via e2e	○		—	
Wireless programming via ConnexxLink™	○		—	

## Features and Accessories

Audiological Features	ITC			
	118 / 55		130 / 71	
	7mi	3mi	7mi	3mi
<b>miFocus</b>				
High res. adaptive TwinMic System™ (availability / channels)	○ / 48	○ / 24	○ / 48	○ / 24
Directional speech enhancement	○	—	○	—
High res. SpeechFocus / automatic	○ / ○	— / —	○ / ○	— / —
Frequency compression	●	●	●	●
<b>miSound</b>				
Feedback cancellation	●	●	●	●
micon Speech and Noise Management (steps)	7	3	7	3
micon Sound Smoothing™ (steps)	3	on / off	3	on / off
micon eWindScreen™ (steps)	3	on / off	3	on / off
micon SoundBrilliance™ (steps)	3	—	3	—
Tinnitus noiser (channels)	20	12	20	12
<b>miGuide</b>				
Sound equalizer (classes)	6	—	6	—
micon Learning (classes)	6	1	6	1
Data logging	●	●	●	●
micon fit	●	●	●	●
Acclimatization manager	●	—	●	—
<b>Basic Features</b>				
Number of channels / handles	48 / 20	24 / 12	48 / 20	24 / 12
Extended bandwidth	●	—	●	—
T-Coil	○		—	
AutoPhone™	○		—	
Battery size	10 / 312		10 / 312	
Battery door on/off function	●		●	
e2e wireless™ 2.0	○		—	
Audio streaming	○		—	
User controls coupling via e2e	○		—	
Wireless programming via ConnexxLink™	○		—	

## Features and Accessories

Audiological Features	HS			
	118 / 55 7mi	3mi	130 / 71 7mi	3mi
<b>miFocus</b>				
High res. adaptive TwinMic System™ (availability / channels)	○ / 48	○ / 24	○ / 48	○ / 24
Directional speech enhancement	○	—	○	—
High res. SpeechFocus / automatic	○ / ○	— / —	○ / ○	— / —
Frequency compression	●	●	●	●
<b>miSound</b>				
Feedback cancellation	●	●	●	●
micon Speech and Noise Management (steps)	7	3	7	3
micon Sound Smoothing™ (steps)	3	on / off	3	on / off
micon eWindScreen™ (steps)	3	on / off	3	on / off
micon SoundBrilliance™ (steps)	3	—	3	—
Tinnitus noiser (channels)	20	12	20	12
<b>miGuide</b>				
Sound equalizer (classes)	6	—	6	—
micon Learning (classes)	6	1	6	1
Data logging	●	●	●	●
micon fit	●	●	●	●
Acclimatization manager	●	—	●	—
<b>Basic Features</b>				
Number of channels / handles	48 / 20	24 / 12	48 / 20	24 / 12
Extended bandwidth	●	—	●	—
T-Coil	○		○	
AutoPhone™	○		○	
Battery size	10 / 312		10 / 312	
Battery door on/off function	●		●	
e2e wireless™ 2.0	○		○	
Audio streaming	○		○	
User controls coupling via e2e	○		○	
Wireless programming via ConnexxLink™	○		○	

## Features and Accessories

Audiological Features	ITE			
	123 / 60		130 / 71	
	7mi	3mi	7mi	3mi
<b>miFocus</b>				
High res. adaptive TwinMic System™ (availability / channels)	○ / 48	○ / 24	○ / 48	○ / 24
Directional speech enhancement	○	—	○	—
High res. SpeechFocus / automatic	○ / ○	— / —	○ / ○	— / —
Frequency compression	●	●	●	●
<b>miSound</b>				
Feedback cancellation	●	●	●	●
micon Speech and Noise Management (steps)	7	3	7	3
micon Sound Smoothing™ (steps)	3	on / off	3	on / off
micon eWindScreen™ (steps)	3	on / off	3	on / off
micon SoundBrilliance™ (steps)	3	—	3	—
Tinnitus noiser (channels)	20	12	20	12
<b>miGuide</b>				
Sound equalizer (classes)	6	—	6	—
micon Learning (classes)	6	1	6	1
Data logging	●	●	●	●
micon fit	●	●	●	●
Acclimatization manager	●	—	●	—
<b>Basic Features</b>				
Number of channels / handles	48 / 20	24 / 12	48 / 20	24 / 12
Extended bandwidth	●	—	●	—
T-Coil	○		○	
AutoPhone™	○		○	
Battery size	13 / 312		13 / 312	
Battery door on/off function	●		●	
e2e wireless™ 2.0	○		○	
Audio streaming	○		○	
User controls coupling via e2e	○		○	
Wireless programming via ConnexxLink™	○		○	

# Features and Accessories

User control	CIC	ITC - HS	ITE
	Push button	Push button + VC	Push button + VC
Volume change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alert tones	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Number of programs	6	6	6

Accessories			
Tek™	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
miniTek™	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ProPocket™	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
easyPocket™	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ePen™	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ConnexxLink™	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

☒ available
 ☐ optional
 ☐ not available



# Abbreviations and Standards

## Abbreviations

The following abbreviations are used in this datasheet:

AI-DI	Articulation Index Directivity Index
HFA	High Frequency Average
MASL	Magneto Acoustical Sensitivity Level
SPLITS	Coupler SPL for an Inductive Telephone Simulator
RSETS	Relative Equivalent Telephone Sensitivity
IRIL	Input Related Interference Level

## Standards

- ▶ All measurements with the 2 ccm coupler were performed according to ANSI S3.22-2009 and IEC 60118-7:2005.
- ▶ All measurements with an ear simulator were performed according to IEC 118-0/A1 and to DIN 45605 (frequency range).
- ▶ Extended frequency range up to 12 kHz for 7mi devices only.

### WARNING

Choking hazard posed by small parts.

- ▶ This instrument is not intended for the fitting of infants, small children and 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.

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.

Find the current issue of this document under: <http://factsandfigures.hearing-siemens.com>