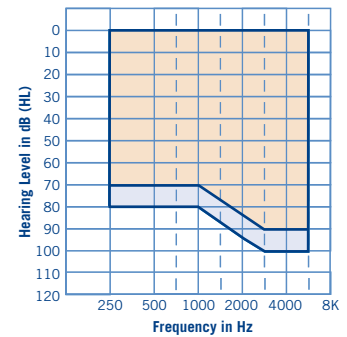


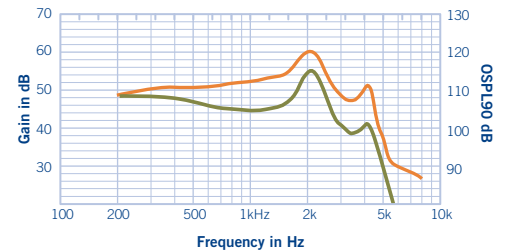


# Radius™ 12 Custom

## TECHNICAL SPECIFICATIONS



Radius 12 ITE (blue) and ITC, CIC (orange) fitting ranges.



OSPL90 (orange) and Full-On Gain (green) curves for the Radius 12 ITE at the highest matrix of 120/55.



The Radius 12 is ideal for active wearers who frequently switch between the broadest range of sound environments. Radius 12 is designed to virtually eliminate feedback and make even the most subtle sounds audible.

## Features

### Active Feedback Intercept

- Virtually eliminates annoying feedback and prevents whistling
- Works in concert with Directional Speech Detector and Acoustic Signature to produce better sound quality

### Integrated Real Ear

- Real ear measurement system built directly into the hearing instrument provides the stimulus and measures the response
- Incorporates data immediately throughout Inspire® OS

### Touchless Telephone Response

Instantaneously and automatically adjusts for optimum telephone communication

### Adaptive Indicator Tones

- Unique tones for memory, low battery, volume, etc.
- Automatically adjusts in noisy environments

### Acoustic Signature

- A state-of-the-art system that identifies unique sound environments and adjusts to them instantly
- Automatically detects Quiet, Mechanical, Wind, and Other Sounds

### Directional Speech Detector\*

- Automatically adjusts to provide the optimal setting in quiet or noisy environments
- Improves speech intelligibility in challenging environments, such as a noisy restaurant

### Data Logging

- Links with Acoustic Signature to identify and log individual sound environments
- Enables the highest level of personalization in adjustments

### Fine-Tuning

Offers the flexibility of 8 independent channels as well as 12 bands for precise levels of gain adjustment

\* Options vary by model.

## Radius 12 Custom ANSI/IEC Data

Measurement	CIC (Completely-In-Canal)		ITC (In-The-Canal)		ITE (In-The-Ear)	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	110 - 131	119 - 138	110 - 115	119 - 124	113 - 120	123 - 130
HFA OSPL90 (dB SPL)	101 - 123	NA	101 - 108	NA	104 - 110	NA
RTF OSPL90 (dB SPL)	NA	109 - 137	NA	110 - 116	NA	113 - 121
Peak Gain (dB)	30 - 71	40 - 78	30 - 50	40 - 60	30 - 55	39 - 63
HFA Full-On Gain (dB)	22 - 65	NA	22 - 45	NA	24 - 48	NA
RTF Full-On Gain (dB)	NA	31 - 77	NA	31 - 55	NA	31 - 57
Frequency Range (Hz)	200 - 7000	NA	200 - 7000	NA	200 - 6000	NA
Reference Test Frequency (kHz)	1.0, 1.6, 2.5	1.6	1.0, 1.6, 2.5	1.6	1.0, 1.6, 2.5	1.6
Reference Test Gain (dB)	22 - 47	24 - 58	22 - 31	24 - 41	24 - 33	24 - 46
Harmonic Distortion						
500 Hz	< 3	< 3	< 3	< 3	< 3	< 3
800 Hz	< 3	< 3	< 3	< 3	< 3	< 3
1600 Hz	< 3	< 3	< 3	< 3	< 3	< 3
Equivalent Input Noise (dB SPL)	< 28	< 28	< 28	< 28	< 28	< 28
<b>(55 – 90 ANSI) (55 – 80 IEC) – Test Mode</b>						
Attack Time (ms)	5	5	5	5	5	5
Release Time 0.1 - s (ms)	5 - 150	5 - 250	5 - 150	5 - 250	5 - 150	5 - 250
Release Time 2.0 - s (ms)	5 - 150	5 - 250	5 - 150	5 - 250	5 - 150	5 - 250
Induction Coil Sensitivity						
HFA SPLITS (ANSI - 96) (dB SPL)	NA	NA	89 - 98	NA	90 - 99	NA
MASL (IEC 118 - 1) (dB SPL)	NA	NA	NA	63 - 85	NA	63 - 88
ANSI/IEC Battery Current (mA)	1.1 - 1.7	1.1 - 1.7	1.1 - 1.5	1.1 - 1.5	1.1 - 1.5	1.1 - 1.5
Idle Current (mA)	1.0 - 1.4	1.0 - 1.4	1.0 - 1.2	1.0 - 1.2	1.0 - 1.2	1.0 - 1.2
Estimated Battery Life for 16-Hour Day						
13 Zinc Air (days)	7 - 11	7 - 11	NA	NA	12 - 16	12 - 16
312 Zinc Air (days)	NA	NA	6 - 9	6 - 9	6 - 9	6 - 9
10 Zinc Air (days)	3 - 5	3 - 5	3 - 5	3 - 5	NA	NA

### Measurement Conditions and Recommendations

The data for Radius hearing instruments are obtained and performance is expressed according to ANSI S3.22 (2003), IEC 60118-7 (2005) and IEC 60118-0 (1983) with Amendment 1 (1994-01). The Micro-Tech proprietary Real Time Analyzer and the Micro-Tech Automated Design Verification Test System comprise the basic test equipment. Data may be subject to change with product refinement.

Because of the adaptive signal processing capabilities of Radius hearing instruments, the hearing instrument must be set to test mode to compare the actual performance of the hearing instrument with these specifications. Radius hearing instruments may be set to test mode with Inspire OS by reading the hearing aid and selecting the "Hearing Aid Test" screen from the menu on the left side of the Inspire OS window, then selecting the "Full On Gain" button.

RF IMMUNITY LEVEL: These hearing instruments have a cell phone immunity rating of M2 or M2/T2. For your cell phone to be compatible with these hearing instruments, the cell phone needs an immunity rating of M3/T3 or higher. Please consult your cell phone specifications for your cell phone immunity rating.