# Cochlear™ Osia® 2 System



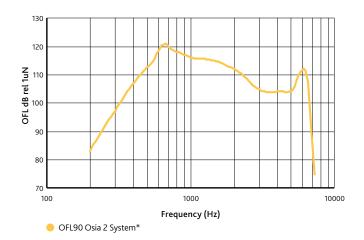
The Cochlear<sup>™</sup> Osia<sup>®</sup> System is an active osseointegrated steady-state implant (OSI) hearing solution that uses digital piezoelectric stimulation to send sound through the bone to the inner ear. It is designed to meet the needs of patients with conductive hearing loss, mixed hearing loss and single-sided deafness (SSD).

The Osia System utilizes unique Piezo Power<sup>™</sup> transducer technology and a digital link that transfers power and data between the sound processor and implant. Powered by the Ardium<sup>™</sup> Smart platform, the slim, off-the-ear sound processor features SmartSound<sup>®</sup> iQ signal processing and advanced wireless connectivity.

The Osia 2 System is suitable for individuals with bone conduction thresholds within the yellow area indicated in the fitting range.

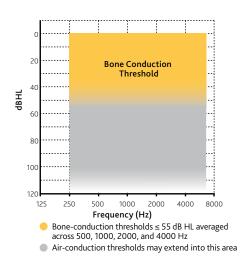


# Maximum output force level



\* Measured on skull simulator TU1000 and compensated for skull impedance. Also compensated for actuator position based on: Transmission properties of bone conducted sound: measurements in cadaver heads, Stenfelt S, Goode RL, The Journal of the Acoustical Society of America 2005 Oct;118(4):2373-91.

# Fitting range up to 55 dB SNHL



# **Osia 2 Sound Processor**

## General

- Fully programmable, head-worn sound processor
- Button to change programs
- Visual indicator (LED)
- Tamper proof battery door
- Dual microphones
- Colors (all covers included in the Osia 2 Sound Processor kit)
- Black

Sandy Blonde

Silver Grey

- Slate Grey
- Chocolate Brown

# **Signal Processing**

- Ardium<sup>™</sup> Smart platform with SmartSound<sup>®</sup> iQ
- 17 channel sound analysis with Wide-band Dynamic Range Compression and Natural Sound Resolution
- 4 user-defined programs with dedicated listening programs for music, outdoor, noisy environments
- Wind noise reduction through WindShield<sup>™</sup> protection technology
- Adaptive directional signal processing using dual microphone technology
- Scene Classifier II controlling:
  - Noise Manager II
  - Active Gain
- Active Balanced Directionality
- Position Compensation II
- Control Sync for bilateral synchronization of program change and app functionality
- Dimensional Feedback Manager
- Compatible with FM and digital wireless
   Assistive Listening Device systems through
   the Cochlear Wireless Mini Microphone 2+
- \* The Cochlear Osia 2 Sound Processor, with battery compartment excluded, is dust and water resistant to level IP57 of the International Standard IEC60529. The Osia 2 Sound Processor with Aqua+ is water resistant to level IP68 of the International Standard IEC60529 when used with LR44 alkaline or nickel metal hydride disposable batteries. Refer to the relevant user guide for more information.



# Ardium<sup>™</sup> Smart inside

## Water and dust resistance

- Meets IP57 classification\*
- Meets IP68 classification with Aqua+ accessory\*

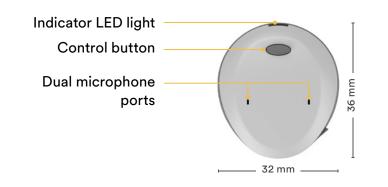
# Connectivity

- Bluetooth® Low Energy
- Made for iPhone Hearing Device with support for direct audio and data streaming
- 2.4 GHz Wireless technology that connects to Cochlear Wireless Accessories

The sound processor is compatible with the following Cochlear True Wireless<sup>™</sup> Devices:

- Cochlear Baha® Remote Control 2
- Cochlear Wireless Mini Microphone 2+
- Cochlear Wireless Phone Clip
- Cochlear Wireless TV Streamer

# Cochlear Osia 2 Sound Processor







# Piezo Power™ technology

# Osia OSI200 Implant

- Piezo Power<sup>™</sup> transducer
- MRI conditional at 1.5 T with magnet in place and the use of the Cochlear MRI Kit or with the implant magnet removed and 3.0 T with magnet removed\*
- Removable implant magnet
- Digital data and power transmission link
- Attachment interface for osseointegrated BI300 Implant

# **BI300 Implant**

• Titanium implant with TiOblast® surface to promote fast and strong osseointegration

# **Osia Fitting Software 2.0**

- Dedicated fitting rationales for conductive hearing loss, mixed hearing loss and SSD
- Patient optimized fitting with Osia Fitting Software (2.0 or later)
- Digital Link Calibration

# **Osia Smart App**

 The Cochlear Osia Smart App is available on App Store and Google Play.
 For compatibility information, visit www.cochlear.com/compatibility.

# Cochlear Osia OSI200 Implant

# Coil Removable magnet Transducer 4.9 mm

# **Cochlear BI300 Implant**



\* In the United States, the Osia System is MR Conditional at 1.5T with the implant magnet in place and the use of the Cochlear MRI Kit or with the implant magnet surgically removed. Patients can be scanned at 3.0T with implant magnet removed.

In Canada, the Osia System is MR Conditional at 1.5T with the implant magnet in place and the use of the Cochlear MRI Splint Kit or with the magnet surgically removed, and at 3.0T with the implant magnet removed.

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# **Technical specifications**

Sound output frequency Range (as per IEC 60118-7)	400 Hz – 7 kHz
Peak OFL at 90 dB SPL*	115 dB rel 1µN
Acousto-mechanical gain (at 50dB SPL, 1600 Hz)*	52 dB (rel 1μN /20 μPa)
Equivalent input noise	27 dB SPL
Total Harmonic Distortion and noise	<5% above 600 Hz
Processing delay	6 ms
Digital inductive link operating frequency	5 MHz
Digital inductive link transmitting range	1-10 mm
Battery type	675 (High power zinc air)
Current consumption	12 mA (in silence and coil to coil distance of 6 mm)
Estimated battery lifetime <sup>†</sup>	22-35 hours
Sound processor weight	9.4 g (with battery and magnet 1)

For more technical details, please refer to OSI001 Osia 2 System Technical Specifications.

- \* Measured on skull simulator TU1000, not compensated for actuator position
- † Battery time is depending on hearing loss level, skin thickness and listening environment.

This material is intended for health professionals. If you are a consumer, please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information.

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Cochlear Sound Processors are compatible with Apple and Android devices. Cochlear Smart Apps are available on App Store and Google Play. For compatibility information visit www.cochlear.com/compatibility.

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