SONATA 2 Cochlear Implant
Unparalleled MRI Safety
SONATA 2 Cochlear Implant
3.0 Tesla MRI—Without Magnet Removal**

3.0 T MRI Safety
Self-aligning magnet enables safe, comfortable 3.0 Tesla MRI scans without need for head bandage.

Individualized CI
With five atraumatic FLEX arrays available in sizes between 20–31.5 mm, you can easily select the ideal electrode array for each individual cochlea.

Symmetrical Design
Central electrode lead exit offers simplified implant placement.

Optimal Lead Handling
Streamlined electrode lead for easier lead management and optimal surgical handling.

Green Marker Dot
Enables better visibility and control of electrode insertion depth.

Learn more about Individualized CI and OTOPLAN at go.medel.pro/1n4ci

Superior Hearing Performance
We engineered our electrode arrays to most closely match the intricate natural design of the cochlea to enable the closest to natural hearing for each individual.

Structure Preservation
If an electrode array deviates from the scala tympani to the scala vestibuli, it damages critical nerve structures and results in significantly lower hearing performance. Our incredibly flexible, free-fitting arrays are designed to gently adapt to the shape of each individual cochlea to protect the delicate natural structures.

Complete Cochlear Coverage
Our long, flexible arrays can be safely inserted all the way to the apical region to provide natural tonotopic stimulation across two full turns of each individual cochlea. This enables a closer to natural hearing experience and significantly better hearing outcomes.1

Natural Sound Coding
FineHearing is the only cochlear implant sound coding that mimics the natural time-coding for low frequencies and provides place-pitch match throughout the cochlea.
By mimicking natural sound coding, FineHearing provides much more natural sound quality.

Excellent Surgical Handling

Central Electrode Lead
Symmetrical central electrode lead design for simplified surgical placement.

Angled Fantail Transition
Angled transition for anatomical fit and secure electrode lead placement.

Green Marker Dot
Coloured marker enables better visibility of insertion depth of the FLEX electrode array.

Optimized Electrode Lead
Streamlined electrode lead for improved handling and easier lead management.

3.0 Tesla MRI Safety

The unique implant magnet freely rotates to self-align in an MRI scan, making it conditionally MRI safe for 3.0 Tesla MRI scans. The robust conical housing enables secure optional magnet removal for clearer brain imaging adjacent to the implant.

- No surgery
- No discomfort
- No hearing downtime
**Technical Data**

**SONATA 2 Cochlear Implant (Mi1260)**

**Stimulation Features**
- Sequential non-overlapping stimulation on 12 electrode channels
- Simultaneous (parallel) stimulation on 2 to 12 electrode channels
- 24 independent current sources
- Stimulation reference electrode on titanium housing
- Stimulation rates of up to 50,704 pulses per second
- Range of pulse phase duration: 2.1–425.0 µs/phase
- Time resolution (nominal values): 167 µs
- Current range (nominal value): 0–1200 µA per pulse phase

**Pulse Shapes**
- Biphasic, symmetric triphasic and triphasic precision pulses

**Comprehensive Diagnostic Toolkit**
- Status Telemetry
- Impedance and Field Telemetry (IFT)
- Electrophysiology measurements reference electrode on titanium housing
- Auditory Nerve Response Telemetry (ART™)
- Electrically Evoked Auditory Brainstem Response (EABR)
- Electrically Evoked Stapedius Reflex Threshold (ESRT™)
- Electric Acoustic Evoked Potential (EAP)

**Housing Design**
- Impact resistance ≥ 2.5 Joule
- Raised implant step for additional stability
- Hermetically sealed titanium housing
- Recommended flattening depth for the stimulator: 2 mm
- Stimulator: 18.8 mm x 24 mm x 5.7 mm (typical)
- Coil: 29.0 mm diameter x 3.3 mm thick (typical)
- Weight: 8.7 g (typical)

**Safety Features**
- Independent safety capacitors for each electrode channel
- Unique Implant ID (IRIS)
- Biocompatible according to Standard ISO 10993-1
- Latex-free*

**MRI Conditions**
- MR Conditional at 0.2, 1.0, 1.5 and 3.0 Tesla
- No magnet removal required even at 3.0 Tesla

**Removable Magnet**
- Magnet removable for minimised image distortion
- Rotatable magnet within hermetic titanium housing
- Self-aligning to external magnetic field
- Conical shape for secure placement

**Electrode Arrays**

**FLEX Series**
- The softest and most flexible electrode arrays, designed for Structure Preservation and Complete Cochlear Coverage. Featuring 19 platinum electrode contacts and FLEX-tip technology for atraumatic insertion. All FLEX series electrodes feature a green orientation marker for improved visibility and positioning during insertion.

**FLEX SOFT**
- 26.4 mm stimulation range
- Diameter at basal end: 0.8 mm
- Dimensions at apical end: 0.5 x 0.4 mm
- Diameter at basal end: 0.8 mm
- Dimensions at apical end: 0.5 x 0.4 mm
- Diameter at basal end: 0.8 mm
- Dimensions at apical end: 0.5 x 0.3 mm

**FLEX COMPRESSED**
- 20.9 mm stimulation range
- Diameter at basal end: 0.8 mm
- Dimensions at apical end: 0.5 x 0.3 mm
- Diameter at basal end: 0.8 mm
- Dimensions at apical end: 0.5 x 0.3 mm
- Diameter at basal end: 0.7 mm
- Dimensions at apical end: 0.5 mm

**CLASSIC Series**
- Features 24 platinum electrode contacts.

**FORM Series**
- Designed specifically for malformed cochlea and for instances where leakage of cerebrospinal fluid (CSF) is expected. Featuring 24 platinum electrode contacts and SEAL technology designed to aid closing of the cochlear opening.

**FORM 14**
- 18.7 mm stimulation range
- Diameter at basal end: 0.8 mm
- Diameter at apical end: 0.5 mm

**FORM 19**
- 14.3 mm stimulation range
- Diameter at basal end: 0.8 mm
- Diameter at apical end: 0.5 mm

**CLASSIC Series**
- Features 24 platinum electrode contacts.

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