

In cooperation with:

Department of Radiology

University Hospital Dresden
Fetscherstraße 74
01307 Dresden

Kindly provided courtesy of

Advanced Bionics GmbH
www.advancedbionics.com

Cochlear Deutschland GmbH & Co. KG
www.cochlear.com

MED-EL Elektromedizinische Geräte Gesellschaft m.b.H.
www.medel.com

Oticon Medical
www.oticonmedical.de

Contact

Department of Otolaryngology, Head and Neck Surgery

Sächsisches Cochlear Implant Centrum

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Disclaimer:

This overview is based on manufacturer information. For more detailed and complete information, please contact the manufacturer.

MRI Safety

of Cochlear Implants, Middle Ear Implants, and Bone Conduction Implants

Overview for patients and healthcare professionals



Sächsisches
Cochlear Implant
Centrum

am Universitätsklinikum
Carl Gustav Carus Dresden




















EAR
RESEARCH
CENTER
DRESDEN



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Carl Gustav Carus
DIE DRESDNER.



| Implant | MRI Status | static magnetic field | max. SAR (head) | max. SAR (body) | head bandage requirement | magnet removable | more info | |
|---|---|---|-----------------|-----------------|--------------------------|------------------|--|-----|
| Cochlear Implants | | | | | | | | |
|  |  | 1,5T | 3,2 W/kg | 2,0 W/kg | no | yes |  https://advancedbionics.com/de/de/home/professionals/mri-safety-information.html | |
| | | 3,0T | 2,6 W/kg | 2,0 W/kg | no | yes | | |
| |  | 1,5T | 3,2 W/kg | 2,0 W/kg | yes | yes | | |
| | | 3,0T* | 2,6 W/kg | 2,0 W/kg | no* | | | |
| |  | 1,5T | 1,0 W/kg | 1,7 W/kg | yes | yes | | |
|  | | | | | | | | |
| Cochlear Implants | | | | | | | | |
|  |  | 1,5T | 2,0 W/kg | 1,0 W/kg | no | yes |  https://www.cochlear.com/41da3ad9-a56b-4c25-8719-9a5a29f1c8bb/D941695_4-01_DE_MRI-Guidelines_EMEA_WEB.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE-41da3ad9-a56b-4c25-8719-9a5a29f1c8bb-mk7Khnr | |
| | | 3T | 1,0 W/kg | 0,5 W/kg | no | yes | | |
| | | 1,5T | 1,0 W/kg | 1,0 W/kg | yes | yes | | |
| |  | 3,0T* | 1,0 W/kg | 0,5 W/kg | no* | | | |
| | |  | 1,5T | 1,0 W/kg | 1,0 W/kg | yes | | yes |
| | 3,0T* | | 1,0 W/kg | 0,5 W/kg | no* | | | |
| |  | | | | | | | |
| | |  | 1,5T* | 1,0 W/kg | 1,0 W/kg | no* | | |
| |  | | | | | | | |
| | Middle Ear and Bone Conduction Implants | | | | | | | |
|  | | | | | | | | |
|  | 1,5T | | | 2,0 W/kg | no | | https://www.cochlear.com | |
|  | 3,0T | 3,2 W/kg | | 2,0 W/kg | no | | | |

Please find your implant model identifier in your implant ID card.

* magnet must be removed



MR conditional
















MR unsafe

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University Hospital Dresden
www.uniklinikum-dresden.de/hno

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| Implant | MRI Status | static magnetic field | max. SAR (head) | max. SAR (body) | head bandage requirement | magnet removable | more info | |
|--|---|---|-----------------|---------------------------------|--|------------------|---|---|
| Cochlear Implants | | | | | | | | |
| MED EL | Mi1250 Synchrony 2 Mi1250 Synchrony 2 PIN Mi1200 Synchrony Mi1200 Synchrony PIN Mi1210 Synchrony ST |  | 1,5T | 3,2 W/kg | 2,0 W/kg | optional | yes |  https://www.medel.com/important-safety-information |
| | | | 3,0T | 1,6 W/kg | 1,0 W/kg for areas with <35 cm from cortex, otherwise 2,0 W/kg | optional | yes | |
| | Mi1000 Concerto Mi1000 Concerto PIN Sonata TI100 |  | 1,5T | 3,2 W/kg | 2,0 W/kg | yes | no | |
| | Pulsar CI100 C40+ C40 |  | 1,5T | 3,2 W/kg | 2,0 W/kg | yes | no | |
| Middle Ear and Bone Conduction Implants | | | | | | | | |
| oticon MEDICAL | Vibrant Soundbridge VORP 503 |  | 1,5T | 3,2 W/kg | 2,0 W/kg | no | no |  https://www.medel.com/important-safety-information |
| | Vibrant Soundbridge VORP 502x |  | | | | | | |
| | Bonebridge BCI 602 |  | 1,5T | Only normal operation permitted | 2,0 W/kg | no | no | |
| | Bonebridge BCI 601 |  | ≤1,5T | no limitations | no limitations | no | no | |
| Cochlear Implants | | | | | | | | |
| oticon MEDICAL | Neuro Zti |  | 1,5T | 3,2 W/kg | 2,0 W/kg | yes | yes |  https://www.oticonmedical.com/for-professionals/cochlear-implant/mri-information-and-guidelines |
| | | | 3T* | 3,2 W/kg | 2,0 W/kg | no* | | |
| | Digisonic® SP |  | 1,5T | 3,2 W/kg | 2,0 W/kg | yes | no | |
| Bone Conduction Implants | | | | | | | | |
| Ponto |  | 1,5T | | 4,0 W/kg | no | | https://www.oticonmedical.com | |
| | | 3,0T | | 4,0 W/kg | no | | | |

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