BiCore B-Li M Rugged

BiCore B-Li M Rugged SDemo

80

60

DATA SHEET

40



Made for **≰** iPhone | iPad | iPod

Earhook

- 60 dB / 133 dB SPL (2 ccm coupler)
- 67 dB / 138 dB SPL (Ear simulator)

ThinTube 3.0

- 60 dB / 125 dB SPL (2 ccm coupler)
- 64 dB / 129 dB SPL (Ear simulator)

ThinTube 3.0 P

- 63 dB / 126 dB SPL (2 ccm coupler)
- 68 dB / 131 dB SPL (Ear simulator)



BiCore B-Li M Rugged · Technical Data

| Туре | Earhook | | |
|---|----------------------------------|---------------|--|
| | 2 ccm coupler | Ear simulator | |
| Output sound pressure level | | | |
| OSPL 90 at 1.6 kHz | _ | 137 dB SPL | |
| OSPL 90 (peak) | 133 dB SPL | 138 dB SPL | |
| HFA OSPL 90 | 125 dB SPL | - | |
| Gain | | | |
| FOG at 1.6 kHz | - | 64 dB | |
| FOG (peak) | 60 dB | 67 dB | |
| HFA FOG | 54 dB | - | |
| Reference test gain | 48 dB | 57 dB | |
| Frequency, noise and directivity | | | |
| Frequency range 80 | 120 – 7700 Hz | 940 – 7700 Hz | |
| 60 / 40 | 120 – 7700 Hz | 940 – 7700 Hz | |
| Equivalent input noise | 17 dB SPL | 17 dB SPL | |
| Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz | 4/3/1/1% | 4/3/1/-% | |
| Tinnitus Function broadband | 70 dB SPL | _ | |
| AI-DI | 4.0 dB | | |
| Latency | < 15 ms | | |
| Inductive coil sensitivity | | | |
| MASL (1 mA/m) at 1.6 kHz | | 95 dB SPL | |
| HFA MASL (1 mA/m) | 84 dB SPL | _ | |
| HFA SPLITS (left/right) | 108 / 108 dB SPL | - | |
| RSETS (left/right) | 0 / 0 dB | - | |
| HFA SPLIV | 108 dB SPL | _ | |
| Battery | | | |
| Battery runtime (without streaming) | up to 39 h | | |
| Battery runtime (incl. 5 h streaming) | up to 36 h | | |
| Cellphone Compatibility | | | |
| Microphone mode | 0.65 – 0.96 GHz 1.4 – 2.7 GHz | | |
| Telecoil mode | 0.65 – 0.96 GHz 1.4 – 2.7 GHz | | |
| | - | | |

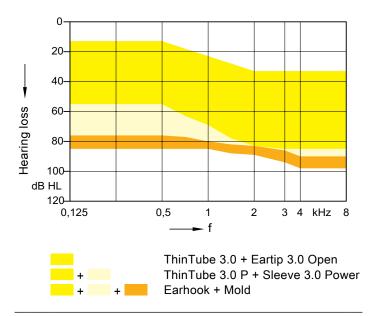
Please find additional information to the values on page "Further information".

BiCore B-Li M Rugged · Technical Data

| Туре | ThinTube 3.0 | | ThinTube 3.0 P | |
|---|----------------------------------|--------------------------------|----------------------------------|--------------------------------|
| | 2 ccm coupler | Ear simulator | 2 ccm coupler | Ear simulator |
| Output sound pressure level | | | | |
| OSPL 90 at 1.6 kHz | _ | 121 dB SPL | _ | 126 dB SPL |
| OSPL 90 (peak) | 125 dB SPL | 129 dB SPL | 126 dB SPL | 131 dB SPL |
| HFA OSPL 90 | 116 dB SPL | _ | 121 dB SPL | - |
| Gain | | | | |
| FOG at 1.6 kHz | | 54 dB | _ | 61 dB |
| FOG (peak) | 60 dB | 64 dB | 63 dB | 68 dB |
| HFA FOG | 50 dB | _ | 56 dB | - |
| Reference test gain | 39 dB | 45 dB | 44 dB | 51 dB |
| Frequency, noise and directivity | | | | |
| Frequency range 80 60 / 40 | 100 – 8100 Hz 100 – 8100 Hz | 100 – 9500 Hz 100 – 8300 Hz | 100 – 7200 Hz 100 – 7200 Hz | 100 – 7400 Hz 100 – 7400 Hz |
| Equivalent input noise | 19 dB SPL | 19 dB SPL | 16 dB SPL | 18 dB SPL |
| Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz | 2/1/1/1% | 4/3/3/-% | 3/1/1/1% | 4 / 4 / 2 / – % |
| Tinnitus Function broadband | 70 dB SPL | _ | 70 dB SPL | - |
| Al-DI | 4.0 dB | | 4.0 dB | |
| Latency | < 15 ms | | < 15 ms | |
| Inductive coil sensitivity | | | | |
| MASL (1 mA/m) at 1.6 kHz | _ | 80 dB SPL | _ | 86 dB SPL |
| HFA MASL (1 mA/m) | 75 dB SPL | _ | 81 dB SPL | - |
| HFA SPLITS (left/right) | 99 / 99 dB SPL | _ | 105 / 105 dB SPL | - |
| RSETS (left/right) | 0 / 0 dB | _ | 1 / 1 dB | - |
| HFA SPLIV | 99 dB SPL | _ | 104 dB SPL | - |
| Battery | | | | |
| Battery runtime (without streaming) | up to 39 h | | up to 39 h | |
| Battery runtime (incl. 5 h streaming) | up to 36 h | | up to 36 h | |
| Cellphone Compatibility | | | | |
| Microphone mode | 0.65 – 0.96 GHz 1.4 – 2.7 GHz | | 0.65 – 0.96 GHz 1.4 – 2.7 GHz | |
| Telecoil mode | 0.65 – 0.96 GHz 1.4 – 2.7 GHz | | 0.65 – 0.96 GHz 1.4 – 2.7 GHz | |

Please find additional information to the values on page "Further information".

BiCore B-Li M Rugged · Fitting Range



Earhook · Basic Data

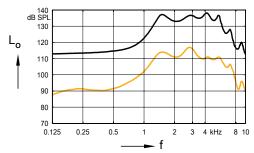
2 ccm coupler

140 dB SPL 120 110 100 80 0.125 3 4 kHz **-** f

Max. Output sound pressure level $(L_1 = 90 \text{ dB})$

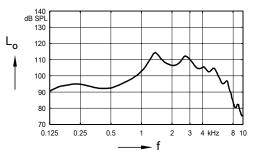
Full on gain $(L_1 = 50 \text{ dB})$

Ear simulator

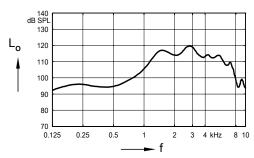


Max. Output sound pressure level $(L_1 = 90 dB)$

Full on gain $(L_1 = 50 \text{ dB})$

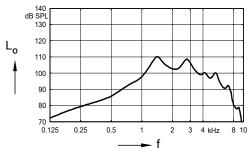


Frequency response $(L_1 = 60 \text{ dB})$

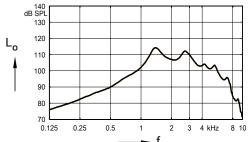


Basic acoustic response $(L_1 = 60 \text{ dB})$

Inductive response



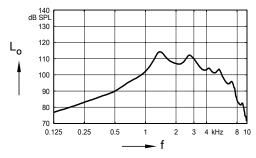
Inductive response (H = 10 mA/m)



SPLITS curve left (H = 31.6 mA/m)

SPLITS curve

right (H = 31.6 mA/m)



SPLIV curve (H = 31.6 mA/m)

ThinTube 3.0 · Basic Data

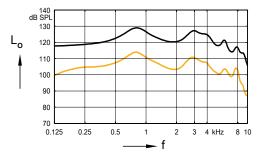
2 ccm coupler

140 dB SPL 130 120 110 100 80 0.125 2 3 4 kHz **-** f

Max. Output sound pressure level $(L_1 = 90 \text{ dB})$

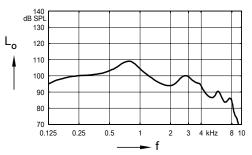
Full on gain $(L_1 = 50 \text{ dB})$

Ear simulator

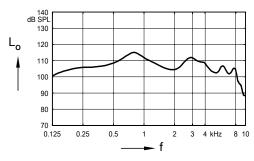


Max. Output sound pressure level $(L_1 = 90 dB)$

Full on gain $(L_1 = 50 \text{ dB})$

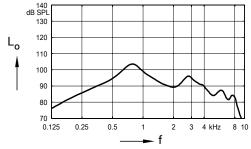


Frequency response $(L_1 = 60 \text{ dB})$

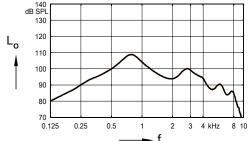


Basic acoustic response $(L_1 = 60 \text{ dB})$

Inductive response

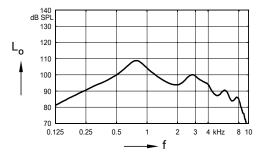


Inductive response (H = 10 mA/m)



SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)



SPLIV curve (H = 31.6 mA/m)

ThinTube 3.0 P · Basic Data

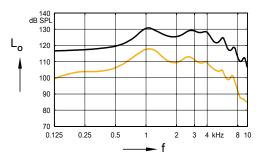
2 ccm coupler

140 dB SPL 120 110 100 80 0.125 3 4 kHz **-** f

Max. Output sound pressure level $(L_1 = 90 \text{ dB})$

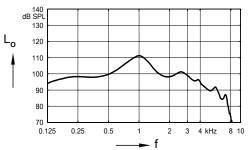
Full on gain $(L_1 = 50 \text{ dB})$

Ear simulator

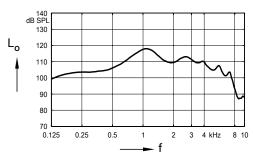


Max. Output sound pressure level $(L_1 = 90 dB)$

Full on gain $(L_1 = 50 \text{ dB})$

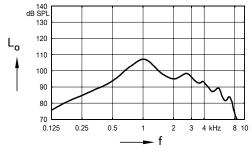


Frequency response $(L_1 = 60 \text{ dB})$

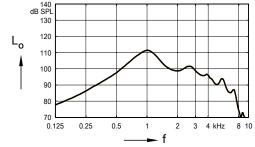


Basic acoustic response $(L_1 = 60 \text{ dB})$

Inductive response



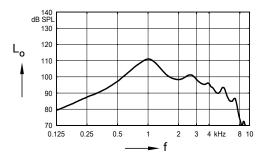
Inductive response (H = 10 mA/m)



SPLITS curve left (H = 31.6 mA/m)

SPLITS curve

right (H = 31.6 mA/m)



SPLIV curve (H = 31.6 mA/m)

BiCore B-Li M Rugged · Features and Accessories

| | 80 | 60 | 40 | |
|--|---|--|--|--|
| Features | | | | |
| Ingress Protection Rating | IP68 | IP68 | IP68 | |
| Channels / Controls / Programs | 48 / 20 / 6 | 32 / 16 / 6 | 24 / 12 / 6 | |
| Soundpro 2.0 | High Res | High Res | High Res | |
| My Voice 2.0 (Own Voice Processing) | • | • | • | |
| Direct Streaming | Made for iPhone/ Android version 10 or higher (ASHA) | Made for iPhone/ Android version 10 or higher (ASHA) | Made for iPhone/ Android version 10 or higher (ASHA) | |
| Headset Mode for iOS | • | • | • | |
| Auto Volume | • | • | • | |
| Wireless Sync | • | • | • | |
| Directionality | Automatic adaptive, iOmni, Front/Back / Left/Right automatic & manual, Narrow | Automatic adaptive, iOmni, Front/Back automatic & manual, Left/Right manual, Narrow | Automatic adaptive, iOmni, Narrow | |
| Noise Reduction | Noise Management, SoundSmoothing, Directional | Noise Management, SoundSmoothing, Directional | Noise Management, SoundSmoothing | |
| Wind Noise Reduction | • | • | • | |
| Auto Echo Reducer | • | _ | _ | |
| Reverb Reducer | • | • | _ | |
| Bandwidth: Extension/Compression | • / • | - /● | - /• | |
| Music Enhancer (presets) | 3 | 3 | 1 | |
| Tinnitus Function | Sound Therapy, Notch Therapy | Sound Therapy, Notch Therapy | Sound Therapy, Notch Therapy | |
| XPhone | • | • | • | |
| Acclimatization / Data Logging | ● / ● | ● / ● | ● / ● | |
| T-Coil | • | • | • | |
| Battery door – tamper proof | | _ | _ | |
| Battery size | _ | _ | _ | |
| Accessories | | | | |
| Smart Key | 0 | 0 | 0 | |
| Smart Transmitter 2,4 | 0 | 0 | 0 | |
| Smart Mic | 0 | 0 | 0 | |
| Rexton APP | 0 | 0 | 0 | |
| Noahlink Wireless | mandatory | mandatory | mandatory | |
| Charging Station B-M | mandatory | mandatory | mandatory | |
| Small earhook | 0 | 0 | 0 | |
| BiCore CROS R-Li | 0 | 0 | 0 | |
| BiCore CROS R312 | 0 | 0 | 0 | |
| BiCore CROS SR | _ | _ | _ | |

[●] available — not available O optional

BiCore B-Li M Rugged · Further information

Abbreviations

The following abbreviations are used in this datasheet:

SPL Sound Pressure Level

OSPL Output Sound Pressure Level HFA High Frequency Average

FOG Full-On Gain

MASL Magneto Acoustical Sensitivity Level

SPLITS Coupler SPL for an Inductive Telephone Simulator RSETS Relative Simulated Equivalent Telephone Sensitivity

SPLIV SPL In a Vertical magnetic field
AI-DI Articulation Index - Directivity Index
IRIL Input Related Interference Level
RTF Reference Test Frequency
ASHA Audio streaming for hearing aids

Standards and additional information

- All measurements with the 2 ccm coupler were performed according to ANSI S3.22-2014 and IEC 60118-0:2015 if applicable.
- All measurements with an ear simulator were performed according to IEC 60118-0:1983 + A1:1994 and to DIN 45605 (frequency range) if applicable.
- All Cellphone Compatibility measurements were performed according to IEC 60118-13:2019, EN IEC 60118-13:2020 and ANSI C63.19-2019.
- Cellphone Compatibility definition: It is expected that the hearing aid user can effectively use a compliant wireless device held in a talking position at the ear. Maximum achievable Cellphone Compatibility range: 0.65–0.96 GHz and 1.4–2.7 GHz.
- Curves and figures representing FOG are measured with 20 dB reduction and 70 dB SPL input level.
- Figures representing Equivalent Input Noise incorporate a moderate expansion.
- Tinnitus noiser measurement conditions: all tinnitus single frequency sliders in max position, master volume slider in default position (0 dB) and local volume control in default position.
- Inductive coil sensitivity values, inductive response curves and T ratings apply for instruments with telecoil only.
- The current consumption is measured in reference test setting (RTS) according to the applicable standards. Due to the
 settling behaviour of hearing aids supporting RF (radio frequency), the battery current is measured 3 minutes after turning on
 (note: no pairing).
- The battery runtime is based on first fit settings using 60 % of the fitting range and an ISTS (International Speech Test Signal) input signal at 65 dB SPL (note: pairing established). The actual battery runtime is determined by battery quality, hearing loss, sound environment, usage and activated feature set. Regarding RF usage, Bluetooth audio streaming from phone to hearing aid and from hearing aid to phone are considered.
- Extended bandwidth up to 10 kHz for 80 devices only.
- The following acoustic connections / ear pieces were used:
 - Earhook
 - ThinTube 3.0
 - ThinTube 3.0 P

Special note for instruments with built-in lithium-ion rechargeable battery

The runtime of all lithium-ion rechargeable batteries reduces over time. The estimates are based on fresh lithium-ion rechargeable battery capacity. Under normal operating conditions, the battery will retain up to 80 % of its initial capacity after 2 years of use. Please note that battery performance will vary depending on individual usage patterns and environmental conditions.



"Made for iPhone", "Made for iPad", and "Made for iPod" mean that an electronic accessory has been designed to connect specifically to iPhone, iPad, or iPod, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone, iPad, or iPod may affect wireless performance.

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.

Legal Manufacturer WSAUD A/S Nymøllevej 6 3540 Lynge

Denmark

 ϵ

Order No. 05294-99T01-7600 www.wsaud.com © 12.2022, WSAUD A/S All rights reserved

Subject to change without prior notice

⚠ WARNING

Choking hazard posed by small parts.

▶ This instrument is not intended for the fitting of infants, children under 3 years or 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.