Oticon Opn S™ miniRITE R

is a discreet style powered by rechargeable lithium-ion battery. The inductive charger secures reliable and fast charging within 3 h. for a full charge.

miniRITE R features telecoil and a convenient double pushbutton.

OpenSound Navigator™ helps users to select and understand speech in all types of environments by balancing the sound sources and attenuating noise.

OpenSound Optimizer™ improves users listening experience and comfort by blocking feedback and secure the targeted amplification of sound sources.

TwinLink™ wireless technology combines binaural communication and 2.4 GHz connectivity with stereo streaming directly from digital devices.

Oticon Opn S is built on the powerful Velox S™ platform which has a programmable firmware architecture, supporting future performance updates.

### Technical data sheet

<table>
<thead>
<tr>
<th>Feature</th>
<th>Oticon Opn S 1</th>
<th>Oticon Opn S 2</th>
<th>Oticon Opn S 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speech Understanding</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OpenSound Navigator™</td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
</tr>
<tr>
<td>- Balancing power effect</td>
<td>100%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>- Max. noise removal</td>
<td>9 dB</td>
<td>5 dB</td>
<td>3 dB</td>
</tr>
<tr>
<td>Speech Guard™ LX</td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
</tr>
<tr>
<td>Spatial Sound™ LX</td>
<td>4 estimators</td>
<td>2 estimators</td>
<td>2 estimators</td>
</tr>
<tr>
<td>Soft Speech Booster LX</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Speech Rescue™ LX</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>OpenSound Optimizer™</strong></td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Sound Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear Dynamics</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Spatial Noise Management</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Fitting Bandwidth*</td>
<td>10 KHz</td>
<td>8 KHz</td>
<td>8 KHz</td>
</tr>
<tr>
<td>Processing Channels</td>
<td>64</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Bass Boost (streaming)</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Listening Comfort</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transient Noise Management</td>
<td>4 configurations</td>
<td>On/Off</td>
<td>On/Off</td>
</tr>
<tr>
<td>Feedback shield LX</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Wind Noise Management</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Personalisation &amp; Optimising Fitting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YouMatic™ LX</td>
<td>3 configurations</td>
<td>2 configurations</td>
<td>1 configuration</td>
</tr>
<tr>
<td>Fitting Bands</td>
<td>16</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Multiple Directionality Options</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Adaptation Management</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Oticon Firmware Updater</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Fitting Formulas</strong></td>
<td>VAC+, NAL-NL1 + 2, DSL v5.0</td>
<td>VAC+, NAL-NL1 + 2, DSL v5.0</td>
<td>VAC+, NAL-NL1 + 2, DSL v5.0</td>
</tr>
<tr>
<td><strong>Connecting to the World</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stereo streaming (2.4 GHz)</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Oticon ON App</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>ConnectClip</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Remote Control 3.0</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>TV Adapter 3.0</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Phone Adapter 2.0</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Tinnitus SoundSupport™</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

* Bandwidth accessible for gain adjustments during fitting

**Operating conditions**
- Temperature: +5°C to +40°C
- Relative humidity: 5% to 93%, non-condensing

**Storage and transportation conditions**
- Temperature and humidity should not exceed the following limits for extended periods during transportation and storage.
- Temperature: -20°C to +60°C
- Relative humidity: 5% to 93%, non-condensing
- Temperature: -20°C to +30°C
- Relative humidity: 5% to 93%, non-condensing

For information on compatibility, please visit www.oticon.global/connectivity
**Oticon Opn S 1**

### Technical data

- **Ear Simulator**

- **2CC Coupler**
  -Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006

### Technical information

Omnidirectional mode is used unless otherwise stated.

### Frequency Response

- **Frequency Response**
  -Measured according to IEC 60318-4:2010 and IEC 60318-5:2006

### Technical data

- **Ear Simulator**
  -Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006

- **2CC Coupler**
  -Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006

### Technical information

Omnidirectional mode is used unless otherwise stated.
Technical data

**Ear Simulator**

**2CC Coupler**
Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006

---

### Oticon Opn S 1

#### Technical information
Omnidirectional mode is used unless otherwise stated.

#### Frequency range
120-9500 Hz

#### OSPL90
- **Peak**: 127 dB SPL
- **HFA**: 116 dB SPL

#### Full-on gain
- **1600 Hz**: 66 dB
- **2000 Hz**: 52 dB
- **4000 Hz**: 55 dB
- **8000 Hz**: 55 dB

#### Reference test gain
- **1600 Hz**: 45 dB
- **2000 Hz**: 40 dB
- **4000 Hz**: 40 dB
- **8000 Hz**: 34 dB

#### Expected operating time, hours
24

#### Equivalent input noise level
OMNI 26 dB SPL

#### Battery
Lithium-Ion

---

### Oticon Opn S 2 & 3

#### Technical information
Omnidirectional mode is used unless otherwise stated.

#### Frequency range
120-7500 Hz

#### OSPL90
- **Peak**: 127 dB SPL
- **HFA**: 116 dB SPL

#### Full-on gain
- **1600 Hz**: 66 dB
- **2000 Hz**: 52 dB
- **4000 Hz**: 55 dB
- **8000 Hz**: 55 dB

#### Reference test gain
- **1600 Hz**: 45 dB
- **2000 Hz**: 40 dB
- **4000 Hz**: 40 dB
- **8000 Hz**: 34 dB

#### Expected operating time, hours
24

### miniRITE R 85

#### Technical data

**Ear Simulator**

**2CC Coupler**
Measured according to ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006

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#### Frequency range
100-8500 Hz

#### OSPL90
- **Peak**: 127 dB SPL
- **HFA**: 116 dB SPL

#### Full-on gain
- **1600 Hz**: 66 dB
- **2000 Hz**: 52 dB
- **4000 Hz**: 55 dB
- **8000 Hz**: 55 dB

#### Reference test gain
- **1600 Hz**: 45 dB
- **2000 Hz**: 40 dB
- **4000 Hz**: 40 dB
- **8000 Hz**: 34 dB

#### Equivalent input noise level
OMNI 21 dB SPL

#### Battery
Lithium-Ion

---

* Measured with the gain control of the hearing aid set to its full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-0+A1:1994 but without influence of feedback.

** Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, sound environment, battery age and use of wireless accessories.
### Technical data

<table>
<thead>
<tr>
<th>Entry</th>
<th>Ear Simulator</th>
<th>2CC Coupler</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency range</strong></td>
<td>OSPL90</td>
<td>OSPL90</td>
</tr>
<tr>
<td>100-8500 Hz</td>
<td>100-8000 Hz</td>
<td></td>
</tr>
<tr>
<td><strong>Telecoil output (1600 Hz)</strong></td>
<td>Peak</td>
<td>Full-on Gain</td>
</tr>
<tr>
<td>1 mA/m field</td>
<td>132 dB SPL</td>
<td>122 dB SPL</td>
</tr>
<tr>
<td>10 mA/m field</td>
<td>132 dB SPL</td>
<td>122 dB SPL</td>
</tr>
<tr>
<td>SPL (L/R)</td>
<td>103/103 dB SPL</td>
<td>103/103 dB SPL</td>
</tr>
<tr>
<td><strong>Total harmonic distortion</strong> (Input 70 dB SPL)</td>
<td>500 Hz</td>
<td>800 Hz</td>
</tr>
<tr>
<td>500 Hz</td>
<td>&lt; 7 %</td>
<td>&lt; 7 %</td>
</tr>
<tr>
<td>800 Hz</td>
<td>&lt; 4 %</td>
<td>&lt; 4 %</td>
</tr>
<tr>
<td>1600 Hz</td>
<td>&lt; 2 %</td>
<td>&lt; 2 %</td>
</tr>
<tr>
<td><strong>Equivalent input noise level</strong></td>
<td>0 mm</td>
<td>23 dB SPL</td>
</tr>
<tr>
<td><strong>Battery</strong></td>
<td>Lithium-ion</td>
<td>Lithium-ion</td>
</tr>
</tbody>
</table>

### Instrument warning

The maximum output capability of the hearing instrument may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument as there may be risk of impairing the remaining hearing of the hearing aid user.

### Expected operating time, hours**

24

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<th>Ear Simulator</th>
<th>2CC Coupler</th>
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</tr>
<tr>
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</tr>
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<td>&lt; 2 %</td>
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<td><strong>Battery</strong></td>
<td>Lithium-ion</td>
<td>Lithium-ion</td>
</tr>
</tbody>
</table>

### Expected operating time, hours**

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* Measured with the gain control of the hearing aid set to its full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-1:1995+AMD1:1998 CSV and ANSI S3.22-2014, IEC 60118-0:2015 and IEC 60318-5:2006.

** Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, sound environment, battery age and use of wireless accessories.
**Technical data**

<table>
<thead>
<tr>
<th>Model</th>
<th>Ear Simulator</th>
<th>2CC Coupler</th>
</tr>
</thead>
</table>

**Technical information**

Omni directional mode is used unless otherwise stated.

**Instrument warning**

The maximum output capability of the hearing instrument may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument as there may be risk of impairing the remaining hearing of the hearing aid user.

**Technical data Ear Simulator**

- **Frequency Response**
  - OSPL90 (120 Hz to 125 Hz)
    - 13 dB SPL
  - OSPL90 (250 Hz to 500 Hz)
    - 18 dB SPL
  - OSPL90 (1 k to 2 k)
    - 130 dB SPL
  - OSPL90 (4 k to 8 k)
    - 125 dB SPL

**Battery**

- Lithium-ion

**Expected operating time, hours**

- 24

---

**Technical data 2CC Coupler**

- **Frequency Response**
  - OSPL90 (120 Hz to 125 Hz)
    - 13 dB SPL
  - OSPL90 (250 Hz to 500 Hz)
    - 130 dB SPL
  - OSPL90 (1 k to 2 k)
    - 125 dB SPL
  - OSPL90 (4 k to 8 k)
    - 125 dB SPL

**Battery**

- Lithium-ion

**Expected operating time, hours**

- 24

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**Technical information**

Omni directional mode is used unless otherwise stated.

**Instrument warning**

The maximum output capability of the hearing instrument may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument as there may be risk of impairing the remaining hearing of the hearing aid user.

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**Technical data 2CC Coupler**

- **Frequency Response**
  - OSPL90 (120 Hz to 125 Hz)
    - 13 dB SPL
  - OSPL90 (250 Hz to 500 Hz)
    - 130 dB SPL
  - OSPL90 (1 k to 2 k)
    - 125 dB SPL
  - OSPL90 (4 k to 8 k)
    - 125 dB SPL

**Battery**

- Lithium-ion

**Expected operating time, hours**

- 24

---

**Technical information**

Omni directional mode is used unless otherwise stated.

**Instrument warning**

The maximum output capability of the hearing instrument may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument as there may be risk of impairing the remaining hearing of the hearing aid user.

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- **Frequency Response**
  - OSPL90 (120 Hz to 125 Hz)
    - 13 dB SPL
  - OSPL90 (250 Hz to 500 Hz)
    - 130 dB SPL
  - OSPL90 (1 k to 2 k)
    - 125 dB SPL
  - OSPL90 (4 k to 8 k)
    - 125 dB SPL

**Battery**

- Lithium-ion

**Expected operating time, hours**

- 24

---

**Technical information**

Omni directional mode is used unless otherwise stated.

**Instrument warning**

The maximum output capability of the hearing instrument may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument as there may be risk of impairing the remaining hearing of the hearing aid user.

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**Technical data 2CC Coupler**

- **Frequency Response**
  - OSPL90 (120 Hz to 125 Hz)
    - 13 dB SPL
  - OSPL90 (250 Hz to 500 Hz)
    - 130 dB SPL
  - OSPL90 (1 k to 2 k)
    - 125 dB SPL
  - OSPL90 (4 k to 8 k)
    - 125 dB SPL

**Battery**

- Lithium-ion

**Expected operating time, hours**

- 24

---

* Measured with the gain control of the hearing aid set to its full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-0+A1:1994 but without influence of feedback.

** Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, sound environment, battery age and use of wireless accessories.

** Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, sound environment, battery age and use of wireless accessories.
The charger is designed for recharging miniRITE R, part of Oticon Opn S™ families. The charger is based on inductive technology. It wirelessly charges the hearing aids within three hours. A magnetic connection secures the hearing aids always stay in the charger. The charger is designed to simplify everyday recharging activities with a few, easy actions.

**Charging**
- Designed to make the most typical daily routine of charging smooth and simple.
- Simply take off the hearing aid and insert it in the charger - no lid to open. Operation so simple it can be done using only one hand.
- The hearing aid automatically starts charging when placed in the charger and turn ON automatically when removed from the charger.
- Charge every night and hearing aid will be fully charged when needed during day time.

**Product facts**
- Inductive charging
- Power ON/OFF LED indicator on charger
- The charger comes with a fixed cable
- High stability due to rubber feet
- Soft, round shapes - easy to clean
- Soft pouch for travelling included

**Intuitive to decode with few simple LED messages directly on the hearing aid:**
- Red = Charging
- Green = Fully charged

**Offering short charging times.** If the hearing aid is completely drained, the normal charging times are:
- 3 h = Fully charged
- 1 h = 50% charged
- 0.5 h = 25% charged

---

**Technical data: Charger**

<table>
<thead>
<tr>
<th>Name</th>
<th>Charger 1.0, Oticon miniRITE R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designed for/compatibility</td>
<td>Oticon Opn S, Oticon Opn Play: miniRITE R</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Ø95 mm /total height of 39 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>140 grams</td>
</tr>
<tr>
<td>Colour</td>
<td>Black</td>
</tr>
<tr>
<td>Power supply plug</td>
<td>USB A</td>
</tr>
<tr>
<td>Status indicator</td>
<td>LED on charger. Indicates Charger ON/OFF status LED on hearing instrument. Indicates charging mode</td>
</tr>
<tr>
<td>Charging time of hearing instruments</td>
<td>Max 3 hours depending on initial state of the battery (Temperature: +5 °C to +35 °) Max 4 hours depending on initial state of the battery (Temperature: +35 °C to +40 °)</td>
</tr>
<tr>
<td>Power source</td>
<td>Supplied power supply unit</td>
</tr>
<tr>
<td>Input voltage</td>
<td>5 V DC</td>
</tr>
<tr>
<td>Input current</td>
<td>≤ 0.2 A (charging two hearing instruments) ≤10mA stand-by (no hearing instruments inserted)</td>
</tr>
<tr>
<td>Cable</td>
<td>Fixed mounted cable / 150 cm</td>
</tr>
<tr>
<td>Connected to external equipment</td>
<td>When connected to external equipment plugged into a wall outlet, this equipment must comply with IEC-62368 (or IEC-60065, IEC-60950 until June 20, 2019) or equivalent safety standards.</td>
</tr>
</tbody>
</table>

**Conditions of use**

**Operating conditions**
- Temperature: +5 °C to +40 °C
- Relative humidity: 5 % to 93 %, non-condensing

**Storage and transportation conditions**
- Temperature: –25 °C to +70 °C
- Relative humidity: 5 % to 93 %, non-condensing

**Atmospheric pressure**
- 700 hPa to 1060 hPa

**Technical data: Power supply unit**

<table>
<thead>
<tr>
<th>Power supply unit</th>
<th>AN05x-050A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input voltage</td>
<td>100 - 240 V AC</td>
</tr>
<tr>
<td>Input current</td>
<td>0.2 A</td>
</tr>
<tr>
<td>Input frequency</td>
<td>50-60 Hz</td>
</tr>
<tr>
<td>Output voltage</td>
<td>5 V DC</td>
</tr>
<tr>
<td>Output current</td>
<td>1 A</td>
</tr>
</tbody>
</table>