



The open sound paradigm **is expanding**

Oticon Opn™ - Now available to more people

Open up
to the world

“

It opened up the world. I was able to engage again.

I went out to dinner with friends in a noisy restaurant. And although I heard the background sounds, I was able to speak across the table [...]. I just loved it.”

Barbara Abramowitz , hearing aid user

Be part of the open revolution

The introduction of Oticon Opn™ is arguably the biggest achievement in our company's 112-year history. It has begun a paradigm shift in hearing care technology that has already been a huge success, being widely embraced by hearing care professionals and users.

More benefits, to more people

The reaction to Oticon Opn has been phenomenal. People from all over the world have experienced the life-changing benefits of the open sound experience. Now, with the introduction of new performance levels and an expanded fitting range that covers hearing loss ranging from mild to severe-to-profound, we are making the groundbreaking technology and benefits of Oticon Opn available to even more users.



Watch how Oticon Opn has changed the lives of people with hearing loss at oticon.global/testimonials or on our YouTube channel – and please share your own story on our Facebook page.

“ We’re finally able to offer our patients **a truly life-changing experience.** ”

Paula Schwartz, hearing care professional

“ I am really finding that I have less anxiety about being in conversations and missing what’s being said [...]. **It made all the difference, and I’m very happy with it. I love it.** ”

Annette C. Quigley, hearing aid user

“ The clearness of the sound is so natural; I find it like having natural hearing, with the ability to hear people speaking from all quadrants of the table. **Every syllable is heard and there is no guesswork, with no harsh sound.** ”

Frederic S. Shapass, hearing aid user

“ **It was like a new world.** And it wasn’t because things are louder, it’s because things are better. ”

Anita Wilson, hearing aid user

“ **I am generally invigorated and have more energy at the end of a day.** In court, my witness interrogations required less focus on hearing, which liberated my thinking to examine arguments more effectively. ”

Christopher N. Mammel, hearing aid user



Open up to a paradigm shift



Old World

In complex listening environments where sound sources are many, dynamic and unpredictable, traditional hearing aid technology lacks the speed and accuracy it takes to handle multiple speakers. By focusing on one sound source at a time and reducing all other sound signals - speech and noise alike - it leaves the user with a narrowed and artificial listening experience.

Reducing all surrounding sounds under-stimulates the brain and deprives it of the context needed for understanding. This makes it harder for it to focus naturally and switch attention to something else when needed.

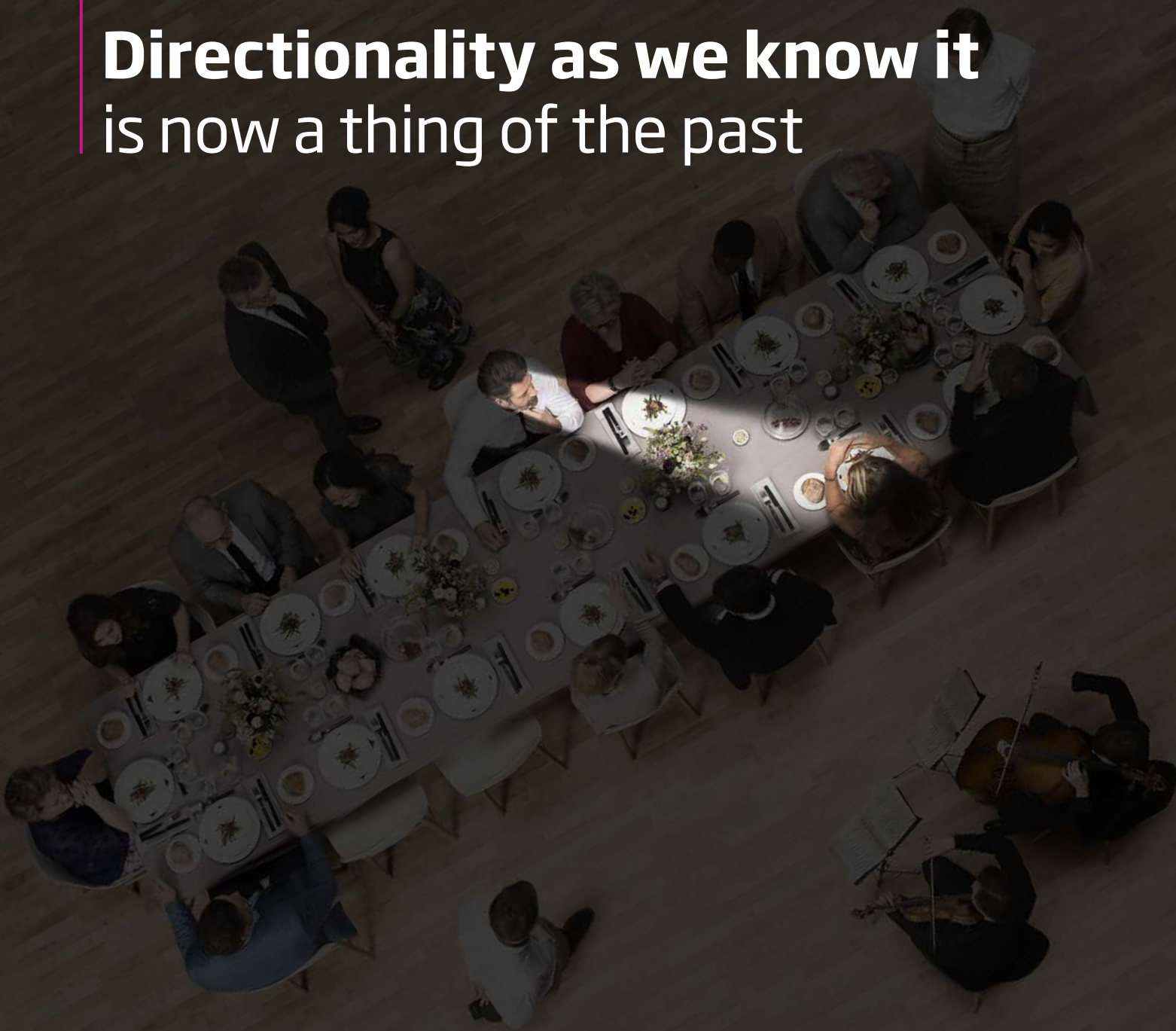


New World

Groundbreaking technology from Oticon literally opens up the world. Fast and precise enough to support the brain, it can analyse and follow the dynamics of the soundscape and differentiate between sounds.

By rapidly and precisely reducing disturbing noise in the constantly open environment, we can now deliver a rich, meaningful soundscape that empowers the brain to choose what to focus on and to change focus readily. This technology marks a fundamental step forward in improving speech understanding in complex environments with multiple speakers - while preserving mental energy.

Directionality as we know it
is now a thing of the past



Old World

Technology focuses on one speaker while suppressing all other sounds

The technological limitations of current hearing aids have led to the use of narrow beamforming directionality, which makes one speaker stand out while suppressing the rest of the sound environment.

This prevents the user from following conversations with multiple speakers in a natural way.

Open up
to the world



New World

Groundbreaking Multiple Speaker Access Technology (MSAT) enables us to open up the soundscape and embrace multiple speakers

Oticon Opn is fast and precise enough to analyse and follow the dynamics of the soundscape, and differentiate between speech and noise.

By rapidly and precisely reducing noise, it allows users to access and handle multiple speakers simultaneously, even in complex listening environments. It supports the brain so users are in better control of what they want to focus on.

The first hearing aid **fast enough to support the brain**

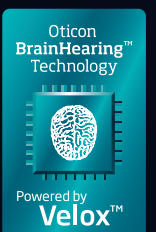
Processing sound 50 times faster than ever before*, Oticon Opn is fast and precise enough to support the brain in making sense of sound.

Market-leading performance

- 50 times faster data processing than ever before
- Market-leading resolution with 64 frequency channels
- Full environment analysis more than 100 times per second
- Capacity to handle more than 1,200 million operations per second
- World's first TwinLink™ communication system: Near-Field Binaural Communication for uncompromising binaural information exchange and 2.4 GHz Bluetooth for advanced connectivity
- World's first Internet-connected hearing aid



**Powered by
the groundbreaking
Velox™ platform**
This revolutionary platform
has enabled this paradigm
shift in hearing care.



The open sound experience

- a perfect combination of two groundbreaking features

Extremely fast and precise technology provides users with more accurate information about the 360° soundscape. This open sound experience lets them more easily locate and separate sound sources including multiple speakers, so they can focus on what they find important. Two groundbreaking features makes this possible.

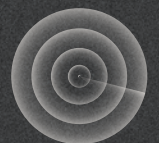
OpenSound Navigator™ scans the sound environment more than 100 times per second, rapidly and precisely attenuates disturbing noise even between individual words, making distinct speech stand out clearly.

Spatial Sound™ LX ensures precise localisation of where sounds are coming from. Data exchange at streaming speed gives the brain the cues it needs to pinpoint the position of all distinct sounds. Powered by TwinLink™, Spatial Sound LX enables more than a 200% increase in binaural communication capacity.*

The winning formula



OpenSound Navigator
- three steps in a split second



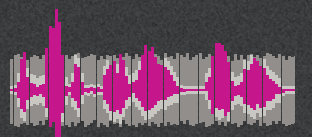
1: Analyse

Scans the full 360° sound environment more than 100 times per second to identify noise and separate it from speech.



2: Balance

Rapidly reduces the levels of loud noise coming from specific directions, while preserving speech.



3: Noise removal

Rapidly attenuates remaining diffuse noise, even between individual words.



Oticon Opn Proven to make it easier on the brain

By giving the brain access to all important sounds, Oticon Opn supports the way the brain naturally makes sense of sound. This reduces the load on the brain, leaving users with more energy.

Providing the brain with substantial help in noisy environments

Oticon Opn provides the brain with better conditions to perform in, enabling it to access multiple speakers without restricting access to the rest of the sound environment. This means it can more easily focus on the most interesting sounds.

This approach opens up the sound environment to make sure all elements that matter are continuously accessible. In doing so, users are able to switch attention if something important or interesting occurs, giving them more control.



Oticon Opn reduces the load on the brain

Oticon Opn makes it easier to listen in challenging environments. This helps to free the cognitive load on the brain, resulting in outstanding user benefits.

Oticon Opn 1 delivers:

20%

less listening effort
- reducing the load on the brain in noisy environments*

20%

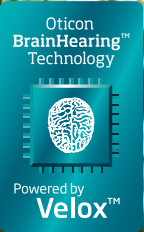
more capacity to remember
- freeing up mental resources, enabling users to recall more in noisy environments*

30%

better speech understanding
- in noisy environments, without suppressing surrounding sounds through narrow directionality*

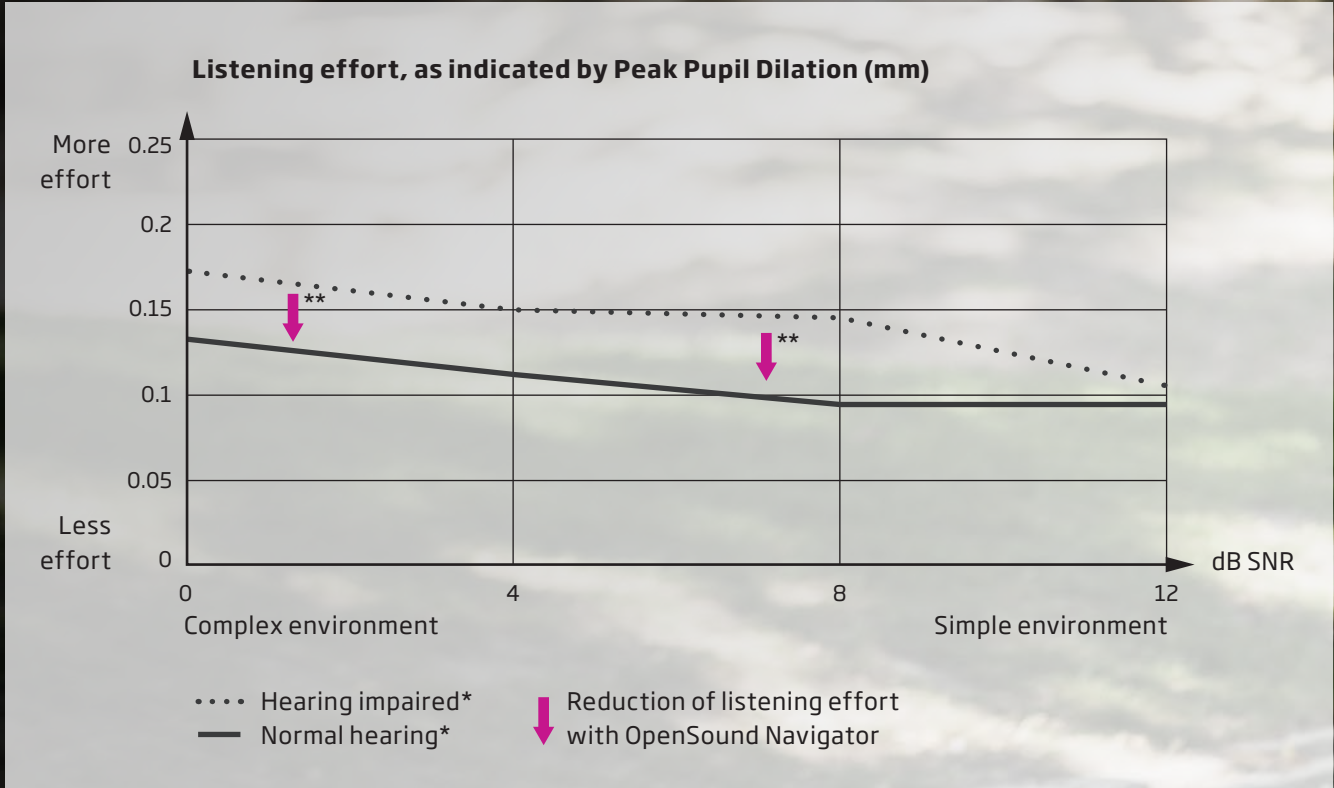
* Le Goff et al. 2016

Oticon Opn significantly reduces listening effort – from simple to complex listening situations



With hearing loss, the brain must work harder to make sense of sounds. New research shows a significant increase in listening effort, even in relatively simple listening environments where noise is somewhat quieter than speech. But with the speed and precision of Multiple Speaker Access Technology (MSAT), the OpenSound Navigator can reduce noise enough to significantly reduce listening effort in everyday listening environments, while at the same time delivering an open sound experience.

OpenSound Navigator significantly narrows the gap between hearing loss and normal hearing in everyday listening environments. Consequently, across different listening environments Oticon Opn 1 will provide the most support.***



* Ohlenforst et al. 2016. Persons with hearing loss had audibility compensated with amplification.
** Wendt et al. 2016, Lunner et al. 2016. Data indicates a 33% and a 35% reduction in Peak Pupil Dilation at SNRs of 1.3dB and 7.1dB, respectively. Individual benefits may depend on prescription.
*** Only Oticon Opn 1 has the full effect of OpenSound Navigator™.

The open paradigm is expanding

With the introduction of new performance levels and power options, the open sound experience of Oticon Opn is now available to even more users.

Oticon **Opn 1**

Oticon **Opn 2**

NEW

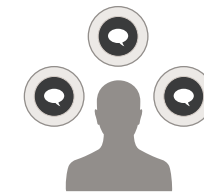
Oticon **Opn 3**

NEW

Open up to a product family that takes BrainHearing™ technology to the next level

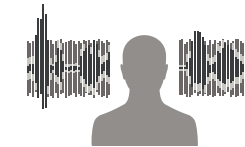


Oticon Opn provides access to all of the important sounds in everyday listening environments, including multiple speakers. Its ability to support the brain in these conditions is made possible by outstanding performance in five key areas, which result in groundbreaking benefits for the user.



1. Open access to all speakers

The open sound experience is built on the foundation of ensuring open access to multiple speakers, even in noisy environments.



2. Rapid noise reduction

Intruding noise puts extra load on the brain, so a rapid and precise reduction of noise coming from specific directions, as well as diffuse background noise, is essential to make distinct speech stand out.



3. Localisation of sounds

With the open sound experience bringing access to all sounds, it's important that users receive precise sound localisation information, so they can decide where to focus.



4. Speech clarity

To ensure maximal speech understanding with less effort, and a richer listening experience, all speech sources in any location are enhanced and clarified.



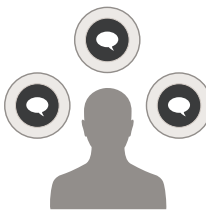
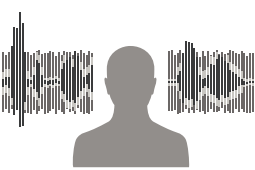
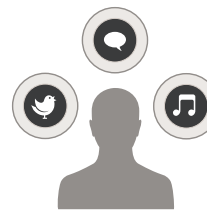




5. A personalised listening experience

The performance of Oticon Opn is optimised by making adjustments based on individual needs and personal preferences.

One open sound experience - three levels of BrainHearing support

BrainHearing support is delivered by a unique combination of technologies working together to reduce listening effort and provide the brain with better conditions to perform in. All three members of the Opn family provide the unique open sound experience, with access to multiple speakers. However, they differ in the amount of support they give the brain in terms of rapid noise reduction, localisation of sounds, speech clarity, and the personalisation of the listening experience - **i.e. they differ in the level of BrainHearing support they deliver.**

 Product		 BrainHearing support	 Open access to all speakers	 Rapid noise reduction	 Localisation of sounds	 Speech clarity	 A personalised listening experience
Oticon Opn 1	Level 1		Yes	● ● ●	● ● ●	● ● ●	● ● ●
Oticon Opn 2	Level 2		Yes	● ●	● ●	● ●	● ●
Oticon Opn 3	Level 3		Yes	●	●	●	●
Supporting features:			<ul style="list-style-type: none">• OpenSound Navigator• Spatial Sound LX	<ul style="list-style-type: none">• OpenSound Navigator• Frequency bands	<ul style="list-style-type: none">• Speech Guard™ LX• Spatial Sound LX• Clear Dynamics• Bandwidth	<ul style="list-style-type: none">• OpenSound Navigator• Speech Guard LX• Clear Dynamics• Bandwidth• Frequency bands	<ul style="list-style-type: none">• Fitting bands• YouMatic™ LX• Soft Speech Booster LX

Open up to more power!

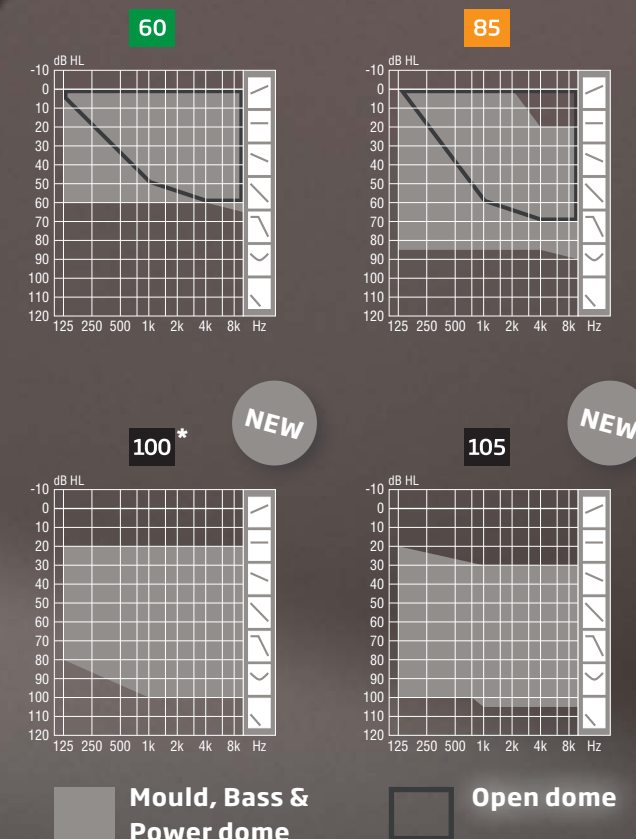
We are expanding the Opn range to cover hearing loss from mild to severe-to-profound

The groundbreaking MSAT technology and the open sound experience are now also available to power users, who will gain significant support from the unique BrainHearing benefits of Oticon Opn, especially in complex and noisy environments.

In addition to miniFit 60 and miniFit 85 receivers, Oticon Opn can now be used with the proven miniFit 100 and 105 power receivers to match a broader range of hearing losses.

For hearing losses ranging from mild to severe-to-profound, Oticon Opn 1 delivers 20% less listening effort, 20% more capacity to remember and 30% better speech understanding.

Speaker fitting ranges



Fitting range details for Oticon Opn 2 & Oticon Opn 3 are available in technical data sheets.
* In addition to the miniFit 100 speaker with dome, the 100 Power Flex mould will be introduced in early 2017.

Open up and connect to the world



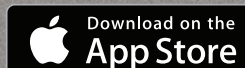
On the go

Oticon Opn provides seamless and easy connectivity with iPhone® by turning the hearing aids into superior quality headphones.



Full control with Oticon ON App

The Oticon ON App enables users to control their hearing aids, choose what they want to hear and adjust the sound.



At home

Oticon Opn hearing aids come with hassle-free wireless connection to devices used in everyday life, such as radios, TVs, laptops and many more - without using a streamer around the neck.

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Oticon Opn – the world's first Internet-connected hearing aid

Hearing aids are now part of Internet of Things




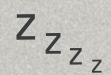












Unlock the power of the Internet of Things

An excellent opportunity to grow your practice

By downloading the Oticon ON App, users can control their Oticon Opn hearing aids from their mobile phone and interact with other Internet-connected devices and services as part of the If This Then That (IFTTT.com) service. The growth of IFTTT and its integration into hearing care provides you with excellent opportunities to differentiate and grow your practice.

Since the introduction of Oticon Opn, users have created and activated a wide range of ways for how to benefit from an Internet-connected hearing aid:

IFTTT

- | | | | |
|---|---|---|--|
|   | Change settings in hearing aid when arriving at work |   | Receive notification when it's time to go to sleep |
|   | Automatically start TV streaming |   | Receive calendar notifications |
|   | Receive notification when hearing aid battery is low |   | Receive notification when an SMS arrives |
|   | Receive a spoken notification when someone is at the door |   | Turn lights off when leaving home |



Oticon invites all Opn users to go to on.oticon.com to explore the endless possibilities available when connecting Oticon Opn.

The **open** revolution is expanding

From breakthrough features and new performance levels to an extended fitting range



New small, discreet miniRITE: Oticon Opn is available in a sleek and modern miniRITE that sits discreetly on the ear, offering a wealth of new features and functionalities.



OpenSound Navigator™

20% less listening effort. 20% more capacity to remember.
30% better speech understanding.*



Spatial Sound™ LX

Locate, follow and shift focus to the most interesting sounds



YouMatic™ LX

Tailors OpenSound Navigator to individual needs and preferences



Speech Guard™ LX

Improves speech understanding in noisy environments, making it easier to follow and engage in conversations



Soft Speech Booster LX

Improves soft speech understanding up to 20% - without turning up the volume



Clear Dynamics

Better sound quality with less distortion in loud environments



Wind Noise Management

Optimises conditions for better speech understanding - even in situations with wind noise



Feedback shield LX

With the new dual-microphone feedback system, feedback is eliminated rapidly and effectively

oticon.global/opn