

The AudiologyNow conference in Anaheim, California was the venue for the launch of a number of important hearing aid technology developments from Siemens.

The manufacturer's latest Inσιο in-the-ear (ITE) instrument family made its debut at the event and has been designed for what the company said was a range of requirements and degrees of hearing loss.

'Many people with hearing loss prefer ITE devices, because they are worn discreetly right inside the ear canal. These are especially suitable for people who also wear glasses, because the hearing aid and the temple piece don't obstruct each other behind the ear,' said a manufacturer statement on the devices.

A new type of ventilation hole called Optivent has been developed for the new Inσιο models. The hole was said to minimise the effects of occlusion, which can make the ITE devices feel like a plug in the patient's ear and cause them to experience distortion in their own voice. In addition, the new vent was also said to ensure sounds remain natural.

The technology works in conjunction with the custom-fitted housings and is also customised for the patient. 'The ideal size of the ventilation hole is based on two factors, which depend on the device's form and the individual degree of hearing loss: it should be as large as possible for utmost wearing comfort, and as small as necessary for the best audiological performance,' said the manufacturer. The ventilation's acoustic parameters are stored on a chip in the device and can be adjusted specifically for the patient.

The Inσιο devices have also been developed to work with the latest generation of the manufacturer's 'best sound' technology, Micon. Said by the manufacturer to deliver spatial acoustics at a quality not previously seen, Micon introduces increased speech intelligibility, directional hearing and bolstered automatic settings.

The devices come in various sizes and forms suitable to both the individual degree of hearing loss and to the anatomy of the auditory canal. All of the important settings can be implemented by remote control and by means of a newly released smartphone app. This remote control can be used to connect the hearing devices to telephones, mobile phones, MP3 players, computers, TVs or home stereo systems via Bluetooth. Sound

Technology drive

Optician looks at some of the new hearing aid developments from German manufacturer Siemens



Siemens latest Inσιο family is designed to be worn discreetly inside the ear

from these products is then transmitted directly to the hearing devices without any noticeable delay and at the desired volume.

Motion behind the ear

Micon technology was also at the forefront of another development announced at the conference, with the technology rolled out in its range of Motion behind-the-ear hearing aids. Three of the four devices in the Motion range have also been drastically reduced in size, with slimmer profiles set to make them more comfortable and discreet.

Motion devices were said to be suitable for patients with mild to profound hearing loss and can be connected to consumer electronic devices via remote control. They also synchronise wirelessly in cases where both ears are equipped with hearing devices.

As well as being smaller, the M and P devices in the Motion range now feature an integrated audio shoe, which increases connectivity options with other devices. For example, a separate microphone can transmit sound directly into the hearing aid. The manufacturer said the patient could therefore understand people who wear the microphone more clearly and distinctly. New tinnitus programs have also been added. Depending on ambient sounds, these can generate an individually adjustable noiser or masker, which distract from the tinnitus while concurrently accentuating speech.

The devices are available in a



Motion devices can be connected to consumer electronic devices via remote control

selection of performance levels as well as 13 colours. Housings are dustproof, protected against dampness and interchangeable – with hearing aid dispensers able to change the unit's colour if the patient requires. All of the operating elements, the audio shoe and the battery compartment can be secured so they cannot be opened by accident – by children for example.

Although Siemens said it had been offering hearing aids for babies, children and teens for decades, new technologies had allowed it to eschew specialised children's devices and instead, offer devices tuned to their needs.

This is particularly true of the new Pure and the Motion SX devices, which can have all of their important settings adjusted discreetly via remote control. The devices can also be connected to music players, stereo systems, TVs, smartphones, telephones and computers via remote control. Their sound is then transmitted to the hearing instruments in stereo. All of these functions can be controlled using an Android smartphone with the new miniTek Remote app.

For children and teens involved in sports, the new Aquaris model features an optional sports clip, which holds the rugged hearing system securely behind the ear. The manufacturer said the device was the digital hearing instrument on the market that fulfilled the international IP 68 standard. This means the unit has extremely high resistance to water, dirt, perspiration and shocks. ●