



**Comprehensive and Compact**  
middle-ear diagnostics

MADSEN OTOflex 100



**otometrics**  
MADSEN • AURAL • ICS

# What you need

Hearing care professionals are experiencing a growing need for more efficient work routines, higher patient throughput, and greater flexibility. They see the need to integrate test data with PC-based patient databases. And they want their patients

to enjoy better service and greater convenience.

Unfortunately, bulky stand-alone test equipment installed in overcrowded examination room, and primitive documentation make it difficult to achieve these important goals. However, it is possible with the MADSEN OTOflex 100 – a comprehensive diagnostic immittance device in a truly compact design.

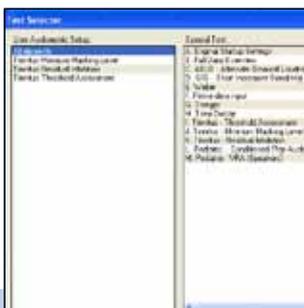
## Flexible

The OTOflex 100 features tympanometry, reflex screening/threshold/decay and ETF – all in a single, compact and highly flexible unit. Hang it on the wall, set it on your desk, or even put it in your pocket, you'll

always have everything you need close at hand. Moreover, the inclusion of 1000 Hz probe tone, wide-band noise reflex stimuli, automatic test sequences, and real-time wireless communication with your PC, ensures great functionality and compliance with recommended test protocols.

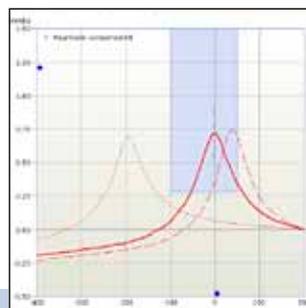
## Comprehensive PC interface

Operating your OTOflex through the OTOSuite software is fast and easy. Navigating through different test options and settings is no problem, and the PC screen provides you with a large and clear overview of test results. PC integration ensures greater efficiency and safer diagnostics.



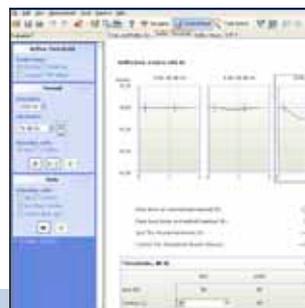
### User test

You can easily create, save and recall your preferences for the ideal testing scenario.



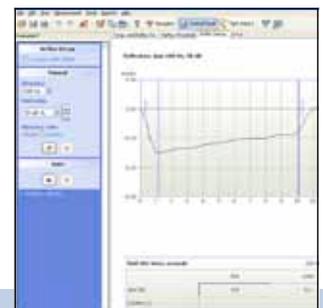
### Tympanometry

Multi-layered tympanograms at 226 and 1000Hz.



### Acoustic reflex

For quick-check screening or full ipsi/contra thresholds.

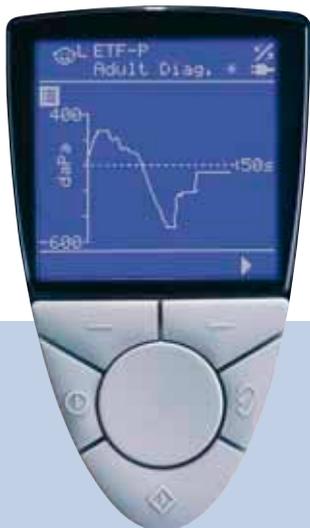


### Reflex decay

Ipsi or contra, with active pressure compensation.



### Three ways to assess the Eustachian Tube Function with MADSEN OTOflex 100



**ETF-I:** I for Intact. OTOflex records up to 3 tympanograms for each ear, and can display them overlaid in the same graph for instant Eustachian tube function assessment with intact tympanic membranes.

**ETF-P:** P for Perforated. In this special test mode the OTOflex carefully inflates/deflates the middle ear using the advanced pump system and records the pressures at which the Eustachian tube ventilates the middle ear

**Admittance Monitoring:** This feature enables easy and efficient patulous Eustachian tube assessment. It continuously measures any changes of the admittance in the ear. Continuous Admittance Monitoring allows for measuring reflexes with cochlear implants, and makes detection, of pulsating changes indicative of e.g. glomus tumors or objective tinnitus, possible.

# Where you need it

The truth is, it's not always easy to get patients to a special examination room or sound booth. Premature babies are often confined to incubators. Patients may be bedridden or not readily mobile. And sometimes, it's simply more efficient not to move the patient to a dedicated test environment.

## **Greater efficiency, less stress**

Thanks to OTOflex's compact design, you can conduct sophisticated middle-ear examinations virtually anywhere. OTOflex is light

enough to carry in a pocket or bag so you can use it at a moment's notice. Or use our custom laptop-style carrying case with room for extra tips and other accessories. And when you're back at the office, you can use OTOflex in combination with the optional wall mount or desk stand, both of which charge the powerful battery so OTOflex is always ready for use.

To help you optimize your time, OTOflex also features custom test setups and flexible use of automatic test sequences so you don't have to enter the same information again and again. And for added convenience, auto-start ensures that tests begin as soon as the probes are correctly positioned – a real advantage when working with restless children. Moreover, a user defined done function, automatically finishes the test, by printing the results or preparing for the next patient.

## **One probe fits all**

Our small, lightweight probe comes apart for easy cleaning and contains its own calibration data – just plug and play! And the probe tip is so slender that the smallest size of eartip is only 3 mm – small enough to fit even premature babies. Yet thanks to our wide range of eartips, you can use the same probe on any patient. What's more, the new eartips lock onto the probe to facilitate simple insertion into the ear canal.

In short, OTOflex is what you need, where you need it. It helps provide better service to your patients because it's faster and more convenient for them, too! You can't ask for much more than that. But there is more...





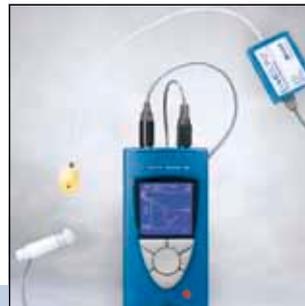
From basic screening to sophisticated middle-ear analysis, OTOflex provides a full range of diagnostic features in a convenient, hand-held design.



**Lightweight, easy to clean probe**  
One probe fits all patients – while our new screening, infant, and mushroom eartips ensure a perfect seal and stay firmly in place.



**Mobility – all day long**  
Take OTOflex with you or keep it nearby in an OTOflex desk stand or wall mount. Large memory for a full day's testing.



**Full diagnostic middle-ear analysis**  
All the diagnostic capabilities you need in one compact, highly flexible unit – and one which you can hold in your hand, put in your pocket or position freely near the patient.



**Flexible solutions for screening**  
The fully transparent screening ear tip ensures easy guidance into the ear canal.

# Well-connected

## OTOflex links seamlessly to OTOsuite™

OTOsuite™ is a software platform on which your individual diagnostic and fitting tools are integrated. Everything you need is contained in one intuitive interface, making testing and data handling efficient and accurate.

The OTOsuite interface provides you with a user friendly and professional

reporting tool. With a single click it allows you to carry out cross reporting, combining measurement data from audiometry and immittance. The reports can even be customized with your name and logo.

## Connection to third party systems

Data can easily be transferred to third party systems such as NOAH and/or Electronic Medical Records.

- Seamless dual user interface
- View live test results directly on your PC screen
- Control OTOflex directly or from your PC
- Wireless radio communication
- Connects to PCs and laptops via standard USB Bluetooth adapters
- Print all test results on a single sheet of standard paper
- Efficient data archiving from OTOflex to NOAH
- Measurements done in OTOsuite can be transferred to 3rd party systems using XML data format.

*OTOflex is free to move where you go, linking you seamlessly to our OTOsuite™ Software universe whenever you are near your PC.*



## OTOflex is part of the OTOsuite universe

This means a strong integration with other diagnostic and fitting tools – which improves your workflow significantly.

## World's leading wireless standard

Bluetooth is already featured in NOAHlink from HIMSA and complies with regulations and standards for medical devices.

## No interference from other devices

Virtual point-to-point radio connections ensure that multiple wireless devices can operate simultaneously and independently.

# Audiometry-Immittance solution



**MADSEN Astera**  
**MADSEN OTOflex 100**

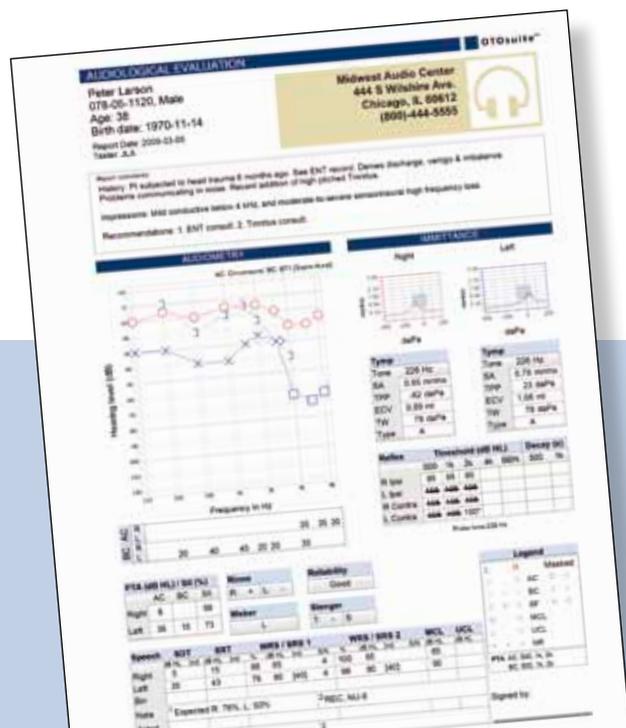


The Astera-OTOflex combo offers you a truly intelligent integration. Benefit from a shared user interface and a one click combined reporting functionality.

With OTOsuite™ as the shared software interface for the MADSEN Astera audiometer and the MADSEN OTOflex 100 immittance device you can move freely from one work process to another. You are provided with a single convenient point of entry to all tests, eliminating the need to switch back and forth between individual applications. And if you work in a NOAH environment, your workflow becomes just as effective.

Individually the MADSEN Astera and MADSEN OTOflex 100 devices are state-of-the-art products. Integrated they outline a visionary clinical solution for high end practices.

*No more faded thermal prints or hand-written notes regarding other tests. Now you can print all test results on a single sheet of ordinary paper.*



# MADSEN OTOflex 100

## Features:

	Quick-check	Diagnostic
<b>Immittance tests</b>		
<b>General specifications (all tests)</b>		
- Probe tones	226, 1000 Hz	226, 1000 Hz
<b>Tympanometry</b>	Auto	Auto
- Multiple layered tympanograms	Yes	Yes
- Jerger norm & auto classification	Yes	Yes
<b>Reflex screening</b>	Yes	Yes
<b>Reflex threshold</b>	-	Yes
<b>Reflex decay</b>	-	Yes
<b>ETF Test for Intact Tympanic Membrane</b>	Yes	Yes
<b>ETF Test for Perforated Tympanic Membrane</b>	-	Yes
<b>Admittance Monitoring</b>	Yes	Yes
<b>Special features</b>		
<b>Single page reports</b>		
- Printout from OTosuite	Yes	Yes
<b>Accessories</b>		
- Desktop charger (with integrated test cavity)	Standard	Standard
- Immittance probe (cable length 180 cm)	Standard	Standard
- Eartip starter selection	Standard	Standard
- Contra EAR-3A insert phone	-	Standard
- Shoulder harness and cable clip	Optional	Standard
- Wall mount	Optional	Optional
- Screening handle	Optional	Optional
- USB Bluetooth PC adapter	Standard	Standard
- Bluetooth printer adapter	Optional	Optional
<b>OTosuite</b>	Standard	Standard
- Synchronous data display on PC	Standard	Standard
- Conduct testing from PC	Optional	Standard
- Data storage	Min. NOAH 3 interface, XML	Min. NOAH 3 interface, XML
- Conductance and susceptance	Standard	Standard

MADSEN OTOflex 100 complies with regulations and standards regarding safety and EMI for medical devices with Bluetooth interface.

Otometrics is the world's leading manufacturer of hearing and balance instrumentation and software. Over the last 50 years we have provided solutions ranging from newborn hearing screening applications and audiologic diagnostics to comprehensive hearing instrument fitting and balance testing.

However, there is more about Otometrics than just instrumentation. The value of Otometrics as a partner is about our commitment to our users and their clients. The reason why major sites around the world have chosen us as their preferred partner is more about Trust in basing their mission-critical activities on what we provide. Our strong worldwide team of experts is determined to carry this legacy into the future.

**MADSEN Astera**

**myaudiometer. It's familiar,  
and it's so much More**



Find out more at [www.myaudiometer.com](http://www.myaudiometer.com)

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