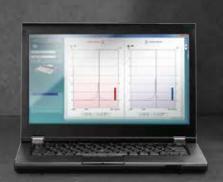
# AT235/AT235h Middle Ear Analyzers

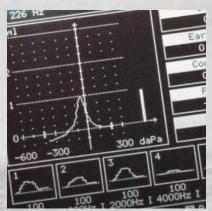
Diagnostic & clinical tympanometry with basic audiometry.



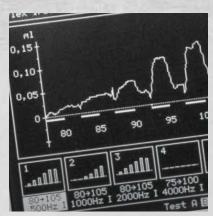




# Fast & reliable middle ear analyzer



Tympanogram and refl ex test results displayed simultaneously



A group of increasing stimuli for reflex testing, clear displays reflex growth with increasing intensity

The AT235 is an automatic middle ear analyzer ideal for diagnostic and screening evaluations.

# Testing flexibility

Test batteries of the AT235 include standard tympanometry, ispsilateral and contralateral acoustic reflex and reflex decay, Eustachian tube function test and air conduction audiometry.

Automated tympanometry may be combined with 2 programmable reflex test batteries. Further manual reflex testing is available for more tests or to confirm/modify automated reflex results.

The AT235 allows more than 40 reflex tests per ear to be stored and printed.

The addition of high frequency probe tones to optimize tympanometry testing of infants is available with the AT235h model.

# User friendly design

Ergonomically designed and user friendly the AT235(h), can be used as a desktop and a portable instrument. With the built-in power amplifier and test cavities it is easy and fast to set up and get started testing.



# Intelligent pump system

Interacoustics utilize two beneficial techniques to acquire tympanograms. The first is an 'endless airflow' technique which improves the instrument's ability to obtain a tympanogram on difficult to test patients or when a slight leak is present. This prevents the system from continually resetting to continue the test.

The second feature is an intelligently controlled pump system with an adaptive speed control. This feature combines a very fast test speed with high resolution of the tympanogram peak which might otherwise be obtained only with a slower pump speed.

# Tympanometry & basic audiometry in one powerful device



# A great variety of possibilities

# AT235h - High frequency and manual tympanometry

The AT235h provides additional high-frequency probe tones for Y-component testing in addition to the traditional 226Hz tone. With the push of a single button, the AT235h will switch to a 678, 800 or 1000 Hz probe tone. A tympanogram that is recorded using a high frequency probe tone (e.g. 1000 Hz) is considered more suitable for screening neonates. In addition to automatic mode, the pump action on the AT235h can be controlled manually. In this mode, pressure increase/decrease is controlled by keys on the front panel. Pressure speed can be toggled between three speeds.

User definable reflex test

Two user programmable acoustic reflex sequences are available allowing you to define a simple screening procedure for test A and a more in-depth evaluation as test B. These protocols may be programmed and/or selected by the push of a button. The parameters for test A and B come with a factory default setting but are easily changed to better suit alternative clinical test routines. The protocols allow intensity presentations at fixed levels, in auto threshold mode or a defined sequence to display reflex growth.

The AT235 and AT235h allow mixing of ipsi and contra reflexes in the protocol as well as a variety of stimuli such as pure tones or noise bands. There are few limitations on storing and printing as more than 40 reflexes may be recorded per ear. All reflex testing may be done manually in addition to the automated routines.

# Decay - Contra and Ipsi

Acoustic reflex decay testing is available with ipsilateral as well as with contralateral stimulation.
The AT235 comes with a standard single DD45C headset and a button insert receiver (CIR22) for stimulating the contralateral ear.

### **Eustachian tube function**

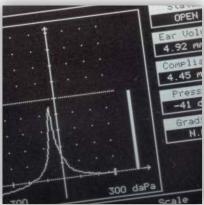
The AT235 performs a single Eustachian Tube Function test suitable for use when the eardrum is intact. Instructions on the display guide the test. Three tympanograms are produced from which the condition of the Eustachian tube can be inferred.

The AT235h has a further ETF test suitable in case of a perforated eardrum.

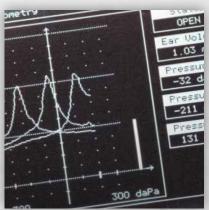
# Visual child distraction

The AT235 has a selection for a moving "choo choo train" on the screen to help keep the child distracted while running tympanometry tests.

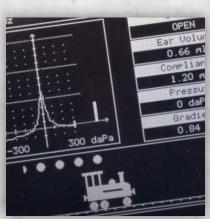
Visual child distraction option



High frequency screening tympanometry records the IYI tympanogram



Automated Eustachian Tube Function test is available

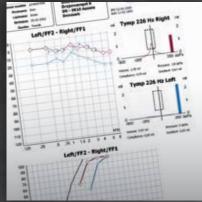


A moving train may help to keep children quiet during testing

# **Extended version**

AT235h is the extended version that offers high frequency probe tones (678, 800 and 1000Hz), ETF tests for intact & perforated eardrums and manual control of the pump action.

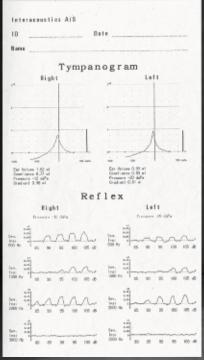
# Combi probe Audiometry PC Integration Printing



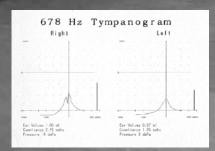
Printout via Diagnostic Suite software and the Print Wizard.



Direct printout from the AT235 or via customizable templates in the Diagnostic Suite software. Save in NOAH or the Interacoustics database OtoAccess™.



Direct printouts from AT235





### **Probe Systems**

The AT235 is supplied with a combi probe system that is easily interchanged for screening and clinical testing purposes. The screening probe tip is ideal for quick tymps and a screening reflex, while the diagnostic probe provides more stability for more lengthy exams that include tymps, refl exes, reflex decay and ETF. The probe has a button for changing ears remotely from the AT235 and for starting and pausing the test.

# **Audiometry**

A basic air conduction pure tone audiometry function is a standard feature on the AT235 and AT235h. Basic pure tone audiograms may be generated manually or with an automatic HL function. All that is required is the purchase of an optional, independent headset. For patient safety, the maximum output may be limited.

# **Printing Options**

A fast thermal printer is built into the instrument. If the data is downloaded to the Interacoustics OtoAccess™ database or NOAH, printouts may be generated through the PC.

# Combined printing and reporting

The Print Wizard combines audiometric, impedance and fitting data for full patient reporting.

Unlimited customizable templates permit useful alternative templates for different test applications.

- Retrieve patient demographics from OtoAccess™ and NOAH
- Merge audiometric and impedance test data on a single page
- Text field for session observations and conclusions
- · Insert bitmaps such as clinic logo
- · Individual session dates
- Highly configurable symbols for quick reference

# Design your own reports

Interacoustics software suites include a common embedded print wizard. This is a flexible tool that supports reporting requirements for streamlining workflow.





# Interacoustics a/s

Interacoustics is a world leading diagnostic solutions provider in the field of hearing and balance assessment. We help the professional audiologic world reach new milestones through continuous developments and a constant focus on integration and direct customer value.

# With you at all times

Whenever you purchase audiological equipment with the Interacoustics brand on it, you are not just guaranteed a quality product but also highly trained support personnel with specialized knowledge. We operate in over 100 countries worldwide through a carefully selected network of distributors and service centers to ensure that you receive total support and service.

# **Product specifications**

All technical and hardware specifications concerning the AT235 can be downloaded from our website.

Read more at interacoustics.com

# Interacoustics a/s

Drejervaenget 8 DK-5610 Assens

**T** +45 6371 3555 **F** +45 6371 3522

info@interacoustics.com interacoustics.com





ABR/OAE

Balance Assessment

Fitting Systems

Middle Ear Analyzers

Audiometers