

# MT10

## Handheld Tympanometer



*Fast and reliable*



**Interacoustics<sup>®</sup>**

Leading diagnostic solutions

# MT10

## Handheld Tympanometer

### Fast and reliable

In modern vital care settings fast and reliable testing is paramount. The MT10 is built to meet these requirements in an easy and very cost effective way. For example otitis media, a major cause of temporary or permanent hearing impairment in children, can be easily and quickly detected with the MT10.

#### Objective analysis

The MT10 automatic tympanometer is fast and easy to operate and provides objective measures that cannot be obtained by otoscopy alone.

#### Easy and fast tympanograms

Results can be obtained quickly and easily with no response required from the patient. This is especially beneficial when dealing with difficult-to-test patients or small children.

#### Clinical application

The MT10 is also well suited for diagnostic use as tympanograms and optional reflex responses are all recorded with great detail. With the MT10 you can detect otitis media, a perforated eardrum, cholesteatomas and certain neurological disorders. You can also check tympanostomy tubes and follow up on post medical treatments.

#### Ipsilateral Acoustic Reflex

Four different reflex tests may be performed per ear using either fixed or automatic intensity selection. The test is carried out at the correct pressure level and the actual reflex characteristics are displayed on the screen for the operator to view and interpret.

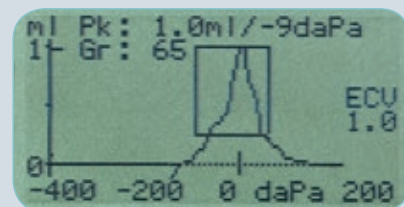
- 4 frequencies (500, 1000, 2000, 4000 Hz)
- Single or multiple dB level threshold search
- Auto detection of threshold

#### 30 patients in memory

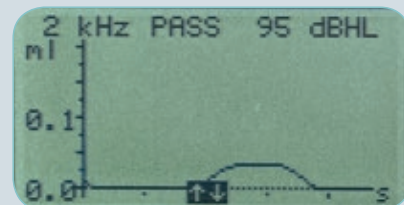
The MT10 can hold test results of up to 30 patients in its memory. This makes it possible to screen a large group of patients and print out the data at a later time.

#### Portability

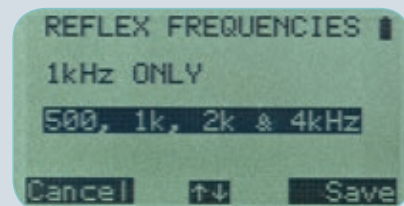
- Lightweight
- Handheld device
- Load data for printing
- Optional carrying case, thermal printer and infrared USB adapter for PC integration available



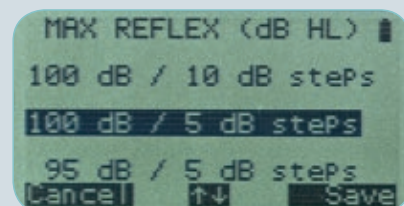
A healthy middle ear will produce a tympanogram easily recognized by its shape. The peak will be within the pass / refer box.



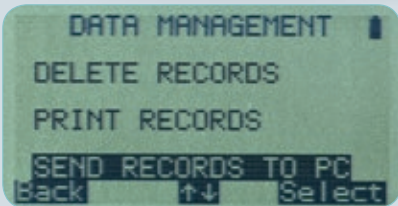
The acoustic reflex test (optional) may be performed to support and enhance the diagnosis. Pass / refer is easily determined.



MT10 offers 4 reflex frequencies



4 reflex levels are available in the optional reflex test (85-100dB)



*It is easy to delete, print or send records to the PC (requires the optional USB adaptor to transfer or print data).*

### PC-integration

The MT10 offers PC-integration using the Diagnostic Suite Windows® software for transferring tympanometric data to the PC.

The diagnostic suite offers features such as:

- Tympanometric data transfer
- Advanced print layout wizard
- Personalized and combined reporting
- Advanced report page
- Patient and session handling
- Full database integration: OtoAccess™ and Noah compatible



### IPSI LATERAL REFLEX

500 Hz PASS 95 dBHL



*Example of printout from the optional thermal printer*

### MT10

- -400 to +200 daPa
- Ipsilateral Reflexes (optional)
- 30 patient memory
- Fast & reliable

*Optional USB adaptor for transfer of data to PC*



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# Technical Specifications

## Tympanometry

|   |   |
|---|---|
| <b>Analysis performed:</b>                | Peak compliance; peak pressure; gradient; equivalent ear canal volume   |
| <b>Probe tone:</b>                        | 226Hz   |
| <b>Pressure levels:</b>                   | +200daPa to -400 daPa   |
| <b>Ear volume measurement range:</b>      | 0.2 ml to 5 ml  |
| <b>Sweep speed:</b>                       | Typically 200-300daPa/sec; dependant on ear & cavity volume   |
| <b>Pressure limits (safety shut off):</b> | +600 to -800daPa  |
| <b>Reflex measurements (optional)</b>     |   |
| <b>Measurement mode:</b>                  | Ipsilateral   |
| <b>Reflex tone levels:</b>                | 500Hz, 1kHz, 2kHz, 4kHz<br>Configurable over range 70dB to 100dB HL (4kHz restricted to 95dBHL)   |
| <b>Number of reflex levels:</b>           | Four: 100dB with 5dB or 10dB steps; 95dB, 90dB or 85dB with 5dB steps   |
| <b>Reflex analysis:</b>                   | Reflex pass/refer at each level tested; Maximum amplitude of each reflex (seen on printed report and PC report); Pressure at which reflex was performed   |
| <b>Pressure used for reflex:</b>          | Tympanogram peak pressure or 0daPa  |
| <b>Reflex level cut-off:</b>              | Optionally, Auto-stop when reflex found.  |
| <b>Reflex threshold detection</b>         | Configurable 0.01-0.50ml in 0.01ml increments   |
| <b>Reflex tone duration:</b>              | 0.6 seconds   |
| <b>Data storage:</b>                      | 30 records. Any recording can be stored once the tympanogram is viewed.   |
| <b>Data held:</b>                         | Patient Initials, Tympanogram and Reflex graphs and analysis for Left Ear and/ or Right Ear, Time and Date of recording, which ears were tested, whether or not the record has been printed and /or sent to a PC, parameters printed and/ or sent to a PC, parameters used for analysis |
| <b>Time stamps:</b>                       | Time and date stamp applied to all recordings, and to the last calibration date   |
| <b>Internal backup power supply:</b>      | >30 days without main batteries fitted  |
| <b>Battery Lifetime:</b>                  | Approx. 400 tests (Alkaline AA batteries)   |
| <b>Operating languages:</b>               | English, German and French  |
| <b>Supported printer:</b>                 | Martel MCP8830 or Sanibel MPTII   |
| <b>Interface:</b>                         | Infra-red, IrDA hardware, 9600 baud   |
| <b>Information printed:</b>               | Space for patient and clinician's details, Tympanogram analysis parameters, Tympanogram, Reflex analysis parameters, Reflex graph, Serial Number of device, Last and Next Due Calibration dates   |
| <b>Dimension and weight:</b>              | LxWxH): 19x8x4 cm excluding probe. Length incl. probe: 22.5 cm<br>Weight without batteries 285 g. Weight with batteries 380 g   |
| <b>Standards:</b>                         | Safety: IEC 60601-1. EMC: IEC 60601-1-2<br>Impedance standard: IEC 60645-5, Type 2 Tympanometer   |
| <b>Medical CE-mark:</b>                   | Yes   |
| <b>Included parts:</b>                    | 4 x 1.5V 'AA' Batteries<br>BET55 Set of disposable ear-tips<br>Handle<br>Instructions for Use<br>Calibration certificate  |

|                        |   |
|------------------------|---|
| <b>Optional parts:</b> | CAT50 Calibration unit 0.2-0.5-2.0-5.0 ml<br>Carrying case<br>MPTII Portable thermal printer<br>3 rolls of thermal paper<br>Diagnostic Suite and OtoAccess™<br>Infrared USB Adapter<br>BET55 Set of disposable ear-tips |
|------------------------|---|

## Other Middle Ear Analyzers:

- Titan Middle Ear Analyzer
- AT235 Middle Ear Analyzer
- AT235h Middle Ear Analyzer with high probe tones

## Audiometry and Middle Ear Analyzer in one:

- AA222 Audio Traveller



The optional carrying case

The MT10 is ergonomic to hold but also offers the possibility of using the included handle to make it even more stable and lightweight as it can rest on your arm during the measurement.



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## Sales and service in your area:



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Read more here:  
[www.interacoustics.com/MT10](http://www.interacoustics.com/MT10)



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