

## Interacoustics Kamplex Middle Ear Analyzer

Portable Middle Ear Analyzer



# “Ready, Get Set, GO!”

A short window of opportunity? Getting a middle ear analysis done is not always easy. Higher patient volumes and the growing demand for more efficient work routines demand strict requirements for every element involved in the clinic – including instrumentation. Titan is designed to help! Titan is a compact middle ear analyzer with all the functions and flexibility in a remarkably portable device. As a tool, Titan emphasizes ease-of-use and speed without compromising test flexibility and reliability.

### Full test battery

Titan spans the complete test battery range, from screening to clinical. Titan’s hardware platform has been specially designed to accommodate future enhancements and upgrades.

### Easy handling

Titan’s slim neck and lightweight form allow for easy use in handheld mode. Together with its contemporary design, Titan suggests a professional appearance in the clinic. The high-resolution color display provides an excellent overview of test progress and results.

### PC integration

Besides handheld use, Titan can also be operated through a PC software suite. There the clinician can adapt the instrument to specific needs by customizing protocols, displays, and printouts. From the PC, the clinician can perform the entire test battery, or exchange patient and session data with the handheld instrument for full portability. The intuitive user interface makes the PC application easy to navigate and use.

### Titan

- *Portable and lightweight*
- *Fully customizable*
- *Complete clinical test battery*
- *Flexible printout with PDF capability*
- *Integrated and customized display and reporting*
- *PC integration and standalone option*

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# Portability

### Power on the move!

To fully accommodate the variety of clinic circumstances and testing needs, Titan provides a strong, flexible platform in a remarkably compact, portable design—a small, lightweight unit with yet many configuration options.

### Functional design

Titan's design is both attractive and functional, conveying clinic professionalism with a contemporary appearance. Indeed, Titan assures a comfortable testing environment. Its truly lightweight (360 grams/0.8 lbs) design makes it ideal to take on ward rounds, to share among multiple exam rooms, or to take on the road.

### Power for the long haul

Titan takes advantage of the latest battery technology to enhance its portability. The hardware platform has been optimized to provide up to 3½ hours of continuous test time on a single charge more than enough power for several days' testing in a busy clinic. The compartment for the single battery is easily accessible for quick replacement. The cradle incorporates a separate charging station, meaning that Titan is always ready to perform.

### Memory

Titan's built-in memory holds up to 250 patients' test data before a transfer is required. Patient information can be uploaded to the unit in advance for quick pairing of session data and easy transfer to a database upon return to the clinic.

### Carrying case

Titan's portability is further enhanced by a convenient and lightweight carrying case.



Titan carrying case

### Clinical highlights

- *Automatic and manual testing*
- *High frequency probe tones (678, 800 and 1000Hz)*
- *Ipsi and contra acoustic reflexes*
- *3 ETF tests: Intact, perforated and patulous*
- *Reflex decay*
- *Reflex latency*



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### Create your own Titan

#### The Titan probe

Titan comes with a flexible probe system easily interchanged for screening and clinical testing purposes. The screening probe tip is ideal for quick tymps, while the clinical probe provides more stability and flexibility for more lengthy exams that include tymps, reflexes, reflex decay and ETF. The clinical version has an integrated shoulder unit for easy control of test progress while focusing on the patient. The shoulder unit easily clips onto the patient or pillow, thus freeing both hands during probe insertion. Titan's ingenious probe design holds all calibrations values, facilitating easy changes of configuration or replacement.



Right ear      Left ear      In ear      Blocked/leaking

#### Create your Titan

- Desktop, wall-mounted or handheld
- Customizable test procedures
- Modular concept
- Flexible probe system

#### Reporting highlights

- Customizable print-outs
- NOAH3 and OtoAccess™ compliant
- EMR integration
- Portable printer option



### The complete solution



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## General Technical Specifications



| Impedance Measuring System   |   |
|------------------------------|---|
| Probe tone:                  | Frequency: 226 Hz, 678 Hz, 800 Hz, 1000 Hz<br>Level: 69 dB HL with AGC, assuring constant level at different ear canal volumes.   |
| Air pressure:                | Control: Automatic.<br>Indicator: Measured value is displayed on the graphical display.<br>Range: -600 to +300 daPa.<br>Pressure limitation: -750 daPa and +550 daPa.<br>Pressure change rate: Very slow, Slow, Medium, Fast, Automatic with slow speed at compliance peak. Selectable in the set-up.   |
| Compliance:                  | Range: 0.1 to 8.0 ml at 226 Hz probe tone (Ear volume: 0.1 to 8.0 ml) and 0.1 to 15 mmho at 678, 800 and 1000 Hz probe tone.  |
| Test types:                  | Tympanometry Automatic, where the start and stop pressure can be user programmed in the set-up function.<br>Manual control of all functions.<br>ETF1 – Non perforated eardrum (Williams test)<br>ETF2 – Perforated eardrum (Toynbee test)<br>ETF3 – Patulous Eustachian tube (Continuous sensitive impedance measurement for 30 up to 150s.)  |
| Indicators:                  | Graphical display Compliance is indicated as ml and pressure as daPa. In PC-controlled mode admittance, susceptance and conductance can be printed.<br>Stimulus level is indicated as dB Hearing Level.   |
| Memory:                      | Tympanometry: 1 curve per ear per tympanometry test. 3 curves per ear per Eustachian tube function test. And theoretically an infinite number of tests per protocol.  |
| Reflex Functions             |   |
| Signal sources:              | Tone - Contra, Reflex: 250, 500, 1000, 2000, 3000, 4000, 6000, 8000 Hz.<br>Tone - Ipsi, Reflex: 500, 1000, 2000, 3000, 4000 Hz.<br>NB noise - Contra, Reflex: 250, 500, 1000, 2000, 3000, 4000, 6000, 8000 Hz.<br>NB noise - Ipsi, Reflex: 1000, 2000, 3000, 4000 Hz.<br>Noise - Contra, Reflex: Wide Band, High Pass, Low Pass.<br>Noise - Ipsi, Reflex: Wide Band, High Pass, Low Pass. |
| Outputs:                     | Contra Earphone: TDH39 earphone, EARTone 3A and/or CIR55 insert for Reflex measurements.<br>Ipsi Earphone: Probe earphone incorporated in the probe system for Reflex.  |
| Test types:                  | Manual Reflex. Manual control of all functions.<br><br>Automated Reflex:<br>- Single intensities<br>- Reflex growth<br><br>Reflex Decay. Automatic, 10 dB above threshold and manually controlled with stimulus durations of 10 and 30s.<br><br>Reflex latency. Automated, first 300 ms from stimulus start.  |
| USB:                         | Input/output for computer communication. Titan can be fully operated from PC. The measurements can then be followed on PC screen.<br>Data can be sent to and saved on the PC and stored in OtoAccess™.  |
| Printer                      | Optional thermal printer (wired or BT) as well as print option through PC suite.  |
| Compatible Windows software: | Interacoustics Database OtoAccess™ and NOAH3  |
| Power supply:                | ASA30M – 0301   |
| Consumption:                 | 0,8 – 0,4 A   |
| Dimensions/weight:           | (LxWxH) 6x6x28cm/2.4x2.4x11inch. Weight: 360 grams/0.8 lbs  |
| Impedance standard:          | IEC 60645-5/ANSI S3.39, Type 1  |
| Safety standard:             | IEC 60601-1, Class I, Type B.   |
| Medical CE-mark:             | Yes   |
| Included parts Titan:        | Titan handheld unit with basic probe<br>Cradle<br>ASA30M Power supply (with converter)<br>Clinical probe extension<br>CIR55 contra insert headset<br>BET55 Ear tips and box<br>DG – LiBat – 001 back-up battery<br>4 cavities (0.2, 0.5, 2 and 5cc)<br>Titan PC suite with IMP440<br>OtoAccess™<br>Operation manual<br>Multilingual CE manual<br>TCB Carrying Bag                         |
| Optional parts Titan:        | Short probe extension<br>Thermal printer AB1310/AB1310 Bluetooth<br>HDC39 contra cup headset<br>EARTone 3A insert headset for contra  |

SPECIFICATION CAN BE SUBJECT TO CHANGE WITHOUT NOTICE

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