DPOAE (order #100110):
- Leak check: analysis of feedback signal (440 Hz probe tone)
- Probe check: limit of maximum sound pressure (stimulus), comparison across speakers (symmetry), leak check (probe fit)
- Calibration: influence calibration with earmold volume adjustment
- Noise detection: narrow band noise around 25 Hz
- Residual noise calculation: weighted averaging, summed weighting factors, artifact rejection: weighted averaging
- Response detection: Fast/Slow at a single point [Fsp], automatic rejection option:
  - Frequency ratio f1/f2: 1.22. Sample rate: 48 kHz (stimulus, response)
  - Minimum DPOAE level criterion: 1.7 dB
  - Measurement interval: 4096 samples
- Stimulus modes with frequency-modulated DPOAE license:
  - Ln = 1.41-1.6 Hz, modulation depth = 50 Hz/1 Hz, 100 Hz/4 Hz
- Multichannel DPOAE: simultaneous measurement of DPOAEs at up to two frequencies at a time
- Frequencies f1, 1, 1.5, 2, 3, 4, 5, 6, 8 kHz:
  - Linear: 0.8 to 10 kHz (step size: 0.5 kHz from 1 to 10 kHz), steps 10 to 10000 Hz (step size: 10 kHz)
  - Logarithmic: 0.8 to 10 kHz (step size: 0.5 kHz from 1 to 10 kHz), steps 1 to 30 points per octave (step size: 1 point per octave)
- Stimulus levels Ls: 20 to 65 dB SPL, step size: 5 dB (single and multiple selections possible)
- Minimum DPOAE level criterion (optional): 20 to 0 dB, step size: 5 dB
- Measurement time: adaptive timeout, manual min/max timeout

DPOAE threshold - cochlear audiogram (order #100111):
- Noise detection: test mean square (RMS) of non-stimulus intervals
- Residual noise calculation & artifact rejection: weighted averaging
- Response detection TEOQUICK: 8 values with changing sign fulfilling a 3 sigma criterion (representing 99.7 % statistical significance)
- TEOAE Diagnostic: user-defined stop criterion (SNR: 6 or 9 dB) in 3, 3 sigma criterion (representing 99.7 % statistical significance)
- Response detection TEQUICK: 8 values with changing sign fulfilling a 3 sigma criterion (representing 99.7 % statistical significance)
- Noise detection: root mean square (RMS) of non-stimulus intervals
- Stimulation protocol: nonlinear
- Stimulus type: short-term stimulus without direct component (0.7-6 kHz)
- Stimulus level: 85 dB peSPL
- Window of analysis: 5 to 13 ms post-stimulus
- TEOAE Diagnostic: user-defined stop criterion (SNR: 6 or 9 dB) in 3, 3 sigma criterion (representing 99.7 % statistical significance)
- Response detection TEQUICK: 8 values with changing sign fulfilling a 3 sigma criterion (representing 99.7 % statistical significance)
- Noise detection: root mean square (RMS) of non-stimulus intervals
- Stimulation protocol: nonlinear

TEOA (order #100109):
- Noise detection: test mean square (RMS) of non-stimulus intervals
- Residual noise calculation & artifact rejection: weighted averaging
- Response detection TEOQUICK: 8 values with changing sign fulfilling a 3 sigma criterion (representing 99.7 % statistical significance)
- TEOAE Diagnostic: user-defined stop criterion (SNR: 6 or 9 dB) in 3, 4, or 5 out of 5 frequency bands [1.15, 2.3, 4 kHz]
- Sample rate: 48 kHz (stimulus), 16 kHz (response)
- Window of analysis: 5 to 13 ms post-stimulus
- Stimulus levels Ls: 85 dB peSPL
- Stimulus type: short-term stimulus without direct component (0.7-6 kHz)
- Measurement protocol: nonlinear

TEOA (Order #100113):
- Full 2-channel diagnostic audiometer [DIN EN 60645-1 class 3]:
  - air - bone - masking
- Child audiometry options (MATCH #100356; BASIS, aquariums, and many more)
- Speech
- Multiple transducer options including circumaural headphones, insert phones and bone conduction. Multiple upgrades available.

Made in Germany
The most common probe tone frequency used in tympanometry is 226 Hz. Using 226 Hz, well known and categorized tympanogram shapes can be obtained. When testing infants younger than four months, a probe tone frequency at 1000 Hz is recommended. For many pathologies, the optimal probe tone frequency is not a well established value. Multifrequency tympanometry can improve on middle ear diagnostics, but can be time consuming with analysis sometimes not occurring immediately. However a subset of multifrequency information – based on the relevant and well established frequencies - can help in daily practice to speed up and improve the diagnostics. Therefore PATH MEDICAL introduced the simultaneous stimulation of 226 Hz, 678 Hz, 800 Hz and 1000 Hz while testing tympanometry. In a single recording four different traces are obtained and ready for immediate interpretation. No need to spend more time or money for post processing of 3D graphs to receive the reports which are used for diagnostics. And besides: 3D graphs are available on SENTIERO too.

Database Software and Data Management

Easily view, archive and export test results:

- With the MIRA database you can transfer the SENTIERO test data in seconds via USB cable from device to MIRA through communication software
- Export full-color, 8.5” x 11” reports in multiple formats, with graphic and tabular data, allows for preset comments to be selected or add text and test information—perfect for consulting with parents, colleagues and for record keeping
- Easily attach test results to patient records within most EMR systems
- Remote display of results on your PC / monitor using the MIRA remote control
- Allows inputting patient demographics onto the device
- NOAH compatible
- Stores up to 1000 patients on the device
- Results can be sorted by birthdate, name, patient ID, examiner, date and time.
- Direct print from your device to pdf

Remote control and live display of results!