

ERO•SCAN® Pro OAE /Tympanometry

ERO•SCAN® Pro

The Ero•Scan Pro was the first system that had the capability of linking DP and TE protocols for diagnostic cochlear mapping. An optional impedance function can be added for tympanometry (226 Hz and 1000 Hz), and ipsilateral acoustic reflexes for an objective evaluation of the middle ear.

Features at a Glance:

- Customizable settings and protocols
- Sequenced protocols permit a full test battery
- Test patient of any age
- Documented test results
- Portable hand held unit runs on alkaline batteries
- Small footprint to easily move from room to room
- Approved, verified protocols can be customized
- Open templates that can be customized
- Quick print to PC without a full transfer required

DPOAE/TEOAE/Tymp and Ipsilateral Acoustic Reflexes

- One probe fit: run three tests without taking probe out of the patients ear - OAE, tympanometry and ipsilateral acoustic reflex.
- OAE and tympanometry can be completed in as little as 20 seconds
- Intuitive interface for fast, easy operation
- Advanced diagnostic OAE capabilities

Advantages of OAE

- DPOAE high to low frequency testing
- Immediate stop of testing upon pass result
- Boys Town normative data included and visible on the hand-held unit screen

Advantages of Tympanometry:

- Evaluates condition of middle ear
- Objective test method



Technical Data

DPOAE System

- Primary Tones:** Frequency: F2 from 1.5 kHz to 12 kHz
Intensity: Up to 6 kHz: 40/40 to 70/60 dB_{SPL}
Over 6 kHz: 40/40 to 65/55 dB_{SPL}
- MIC System Noise:** ≤ -20 dB_{SPL} @ 2 kHz (1 Hz Bandwidth)
- Artifact:** < -20 dB_{SPL} @ 2F1-F2 Frequency
- F1/F2 Ratio:** 1.2 (default) adjustable 1.1 to 1.4
- F1/F2 Differential:** 0 to 30 dB_{SPL}

TEOAE System

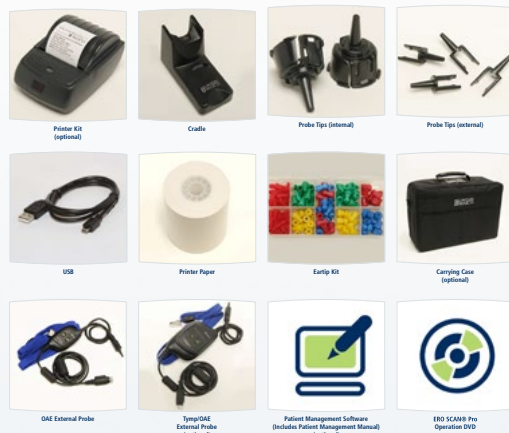
- Stimulus:** Adjustable up to 83 dB_{SPL} Broadband Click
- Click Bandwidth:** 500 Hz to 4000 Hz
- Analysis Bands:** 6 or 10 Bands
- Artifact:** < -10 dB_{SPL}

Acoustic Reflex System

- Stimulus:** 500, 1000, 2000, 4000 Hz Pure tone
Broadband noise, low pass noise, high pass noise
- Probe Tone:** 226 or 1000 Hz
- Stimulus Intensity:** 500-4,000 Hz 70-95 dB_{HL}, in 5 dB steps
Noise stimulus 60-90 dB_{HL}, in 5 dB step
- Standards:** IEC60645-5; ANSI S3.39-1987

Parts & Accessories

The ERO•SCAN® Pro OAE System is available in three configurations: Screener, Standard and Clinical. The 12 frequency protocol will only appear on DP Standard or Combo Diagnostic instruments (supported by both OAE and Tympanometry probes). The Acoustic Reflex capability is available for any configuration of instrument, but requires a Tympanometry probe.



Applicable CPT Code(s):
OAE: 92558, 92587, 92588
Tympan Probe, option includes: 92550, 92567, 92568

Tympanometry System

- Probe Tone Frequencies:** 226 Hz, 1000 Hz
- Probe Tone Level:** 85 dB_{SPL} with in-ear calibration
- Air Pressure Range:** 0.05cc to 3.0cc: +300 to -400 daPa
3.0cc or greater: at least +200 to -200 daPa
- Air Pressure Capacity:** 0.05cc to > 5.0 cc
- Air Pressure Speed:** 60 daPa/sec. nominal
500 to 700 daPa/sec (depending on ear volume)
- Test Time:** 2.5 seconds nominal (depending on ear volume)
- Overpressure Limit:** 1.0cc ear canal volume < 3 psi (2000 daPa)

STANDARD ACCESSORIES

- Ear tip kit
- Cradle
- USB
- OAE external probe
- Probe tips (internal)
- Probe tips (external)
- Operation manual

OPTIONAL ACCESSORIES

- Printer
- Carrying case
- Tympan/OAE external probe
- Patient management software

