
Technical Specifications
OtoRead™
Portable OAE



General Technical Specifications

STANDARDS

EMC: Conforms to EN 60601-1-2.
Safety: Conforms to EN60950



MEDICAL CE-MARK:

The CE-mark indicates that Interacoustics A/S meets the requirements of Annex II of the Medical Device Directive 93/42/EEC. Approval of the quality system is made by TÜV identification no. 0123.

PROBE SPECIFICATIONS

Measurement Type: Distortion Product Otoacoustic Emissions (DPOAE) and/or Transient Evoked Otoacoustic Emissions (TEOAE)
Frequency Range: 1.5 to 12 kHz (DPOAE) 0.7 to 4 kHz (TEOAE)
DPOAE Stimulus Intensity Range: 40 to 70 dB SPL
TEOAE Stimulus Intensity Range: 83 dB SPL (± 3 dB)
Maximum Output (protection): 90 dB SPL
Microphone System Noise: -20 dB SPL @ 2 kHz (1 Hz bandwidth) / -13 dB SPL @ 1 kHz (1 Hz bandwidth)
Stimulus Sampling Rate: 31,250 Hz

INSTRUMENT SPECIFICATIONS

Power Supply: (4) AA/UM-3/R6 cells - Alkaline (6 V total)
Battery Life: Approximately 300 tests
Instrument Weight: 300 g/10.6 oz. including batteries

PRINTER SPECIFICATIONS

Type: Thermal dot matrix line printer
Speed: >10 lines per second. Full printout both ears approx. 7 sec.
Operating Noise: <50 dB SPL
Weight: 845 g/1.4 lbs. including power supply
Power Supply: EN60950
Input: 100-240 V~, 50-60 Hz, 0.8A
Output: +7 V, 5.0 A
Paper: Calculator-type thermal roll – 57 mm/2.25" wide

PROCESSOR SPECIFICATIONS

Digital Signal Processor: Motorola 56303 24-bit 66 MHz 3.3 V
Storage: 2 Mbit Flash EEPROM (non-volatile)
Battery Backup: 0.1F 5.0 V (approx. 24 hours)
CODEC: 18 bit D/A, 18 bit A/D 96 dB SNR typical
Display: 4 line x 10 character STN liquid crystal
Switches: Membrane keypad 1 million + actuation

MAXIMUM SPL

The maximum sound pressure level output of this instrument remains well below 90 dB SPL throughout the audible frequency range of 20 Hz to 20 kHz. This level is well within OSHA permissible limits of 90 dBA for 8 hours.
Microphone Frequency Response (Nominal) System Noise Floor (Nominal)