



# GSI AUDIOscreeener<sup>+</sup>

## OAE AND ABR HEARING SCREENING

### Product Specifications

#### General Specifications

- 4.01" (W) x 7.75" (D) x 1.77" (H)
- Shipping Weight: 1.26lb
- Test Types: Distortion Product Otoacoustic Emissions, Transient Evoked Otoacoustic Emissions and Auditory Brainstem Response
- Screening Methods: Presence/Absence (DPOAE & ABR), Level (DPOAE & TEOAE), or Latency (ABR)
- Display: Pass/Refer/Noise or Graphical
- Reports: Simple or Detailed
- ABR tests: Using Comfort Cups or Probe – protocols included
- Storage: Up to 300 patients
- Data Transfer: Infrared to computer or printer



#### DPOAE Operating Specifications

- Frequency Range: 2,000 Hz to 6,000 Hz,  $\pm 2\%$
- Frequency Resolution: 50Hz
- Level Measurement Accuracy:  $\pm 1$  dB SPL
- Dynamic Range: 96 dB
- Test Time: Varies dependent on parameters selected
- Automated pass criteria: DPOAE SNR and/or DPOAE Level

#### TEOAE Operating Specifications

- Frequency Range: 250 Hz to 5,250 Hz,  $\pm 2\%$
- Frequency Resolution: 50Hz
- Level Measurement Accuracy:  $\pm 1$  dB SPL
- Dynamic Range: 96 dB
- Test Time: Varies dependent on parameters selected
- Automated pass criteria: TEOAE SNR and TEOAE Reproducibility

#### ABR Operating Specifications

- Stimulus types: Click 100  $\mu$ sec width, Blackman window tone pips (2KHz, 4KHz)
- Stimulus Polarity: Rarefaction, Condensation, Alternating
- Stimulus Rate: 32 to 62 per second
- Stimulus Intensity: 0 to 100dB in 5dB steps
- Level Measurement Accuracy:  $\pm 1$  dB SPL
- Input Frequency Range: 30Hz to 3,000Hz
- Waveform latency Delay:  $\pm 0.2$  msec
- Common Mode Rejection: 108 dB
- Gain: 43 dB
- Automated Impedance Testing
- Automated Pass criteria: ABR Fsp

#### Power

- Power AC Adaptor: 100-240VAC
- Line Frequency Range: 50 to 60 Hz

#### Battery

- NiMH 2150 mAh
- Operating life: Approximately 24hrs
- Recharge time: Approximately 2hrs

#### System Configuration

- Each AUDIOscreeener+™ comes with AUDIOtrac™, a Windows based patient database software package

#### System Requirements for AUDIOtrac

- Windows Operating system (95, 98, 2000, ME, XP, or NT)
- CD-ROM Drive
- 5 Mb or more available space on hard drive
- 3.5", 1.44 Mb floppy disk drive
- An Infrared port (IrDA) set to COM 1.
- For systems that do not have an IrDA as standard a special IrDA is provided
- Screen resolution 800 x 600 or larger

#### Environmental

- Temperature:
  - Storage: 32° F to 122° F
  - Operating: 50° F to 104° F
- Humidity: up to 95%, (non-condensing)



#### Alarms

- Low Battery, Dead Battery
- Database Error
- Internal Circuit Error

#### Quality System

- Manufactured, designed, developed and marketed under an ISO 13485, ISO 9001 certified quality system

#### Compliance/Regulatory Standards

Designed, tested and manufactured to meet the following domestic (USA), Canadian, European and International Standards:

- UL 2601-1 Standard for Safety Medical Equipment
- IEC 601-1-2 Medical Electrical Equipment CISPR 11 (EN55011)
- IEC 1000-4-2, IEC 1000-4-3, IEC 1000-4-4, IEC 1000-4-5 EN 61000-4-11 IEC 10000-4-8
- ANSI S3.6-1996 IEC 60601-2-26 IEC 60601-2-40 IEC 60645-3
- CSA C22.2, No. 601-1
- Medical Device Directive (MDD) (ID No.: 0086) to comply with "EC Directive" 93/42/EEC



Setting The Clinical Standard

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