# RM500SL™

Specifications

All-new NOAH® module available!

## Storage & Transportation

Temperature....-20ºC to +60ºC
Relative humidity (non-condensing)....5% to 95%
Atmospheric pressure....500-1060 hPa

## General

Overall dimensions....15.5"x12.75"x4.25"
Weight....16.4 lbs (7.5kg)
Power source:....100-240V, 50-60Hz, 250 VA
Fuse....2A type T, 250V
Display type....fluorescent backlit active color
Display size....12.1" diagonal
Internal printer....3" (80mm) Thermal line printer, 200 dots/inch
Power amplifiers....2
Stimulus channels....2
Measurement channels....1
Connectors....1-USB
....1 - Ethernet (RJ45)
....1 - RS232 serial (9D)
.... 2 - auxiliary audio outputs (1/4"mono)
....1- RECD transducer(3.5mm st)
....1 - test chamber ref. mic.(3.5mm st)
....1 - coupler microphone(3.5mm st)
....1 - battery substitute(3.5mm st)
....1 - real-ear mic.(3.5mm st)

## Test Box

Working Space....8.8"x3.5"x1.5"
Test Box Isolation @ 1kHz: ....>25 dB
Speaker....1 - 2"x3"
Induction Coils.....1 - Telephone Magnetic Field Simulator (TFMS ANSI S3.22 - 2003)
Battery Simulator....per ANSI S3.22 2003
Frequency Range....200 - 8000 Hz
Coupler microphone noise floor ....(200 – 8000 Hz): <40 dB SPL
Test Stimuli....tone, tone burst, pink noise, user supplied, calibrated or live speech, ISTS, filtered speech for verifying frequency-lowering instruments
Test stimulus levels....40 to 90 dB SPL in 5 dB steps
Test stimulus levels (inductive)....31.6mA/m per ANSI S3.22 - 2003
Test stimulus distortion
....<2% at 90dB SPL
....<0.5% at 70 dB SPL
Test stimulus accuracy at reference mic. for tones (200-2000 Hz)....+/- 1.5 dB SPL
Test stimulus accuracy at reference mic. for tones (2000-8000 Hz)....+/- 2.5 dB SPL
Equalization method...real time modified pressure method (stored for open fittings)
Analysis frequencies per octave....12
Analysis filter bandwidth....1/12 octave
Measurement accuracy at 1 kHz....+/- 1dB
Measurement accuracy re 1 kHz
....+/- 1 dB (200-5000 Hz)
....+/- 2.5 dB (5000-8000 Hz)
Measurement range....30 - 140 dB SPL
Harmonic distortion measurement....2nd and 3rd or 2nd plus 3rd
Harmonic distortion range....200 to 4000 Hz
Harmonic distortion accuracy....+/- 1%
Battery drain range....0 - 20mA
Battery drain accuracy....+/- 5%
Battery drain resolution....+/- .01 mA

**ANSI S3.22 - 1996 and 2003 tests available**

OSPL90.....Full-on Gain.....Reference Test Gain.....Frequency Response.....Frequency Range.....Maximum OSPL90.....Harmonic Distortion.....Attack & Release time.....Equivalent Input Noise.....Input/Output Curves.....Coupler SPL - Telephone Simulator.....Simulated Telecoil Sensitivity.....Battery Drain

**Other tests Available**

Speechmap®.....Coupler SPL vs freq.....Coupler gain vs freq.....Spectral analysis.....Distortion vs freq.....Manual measurement of output, gain and distortion

## On-Ear

Speakers....1 - 2"x 3"
Probe microphone tube....Silicone 1.0 mm diameter x 75 mm
Probe microphone noise floor.... (200 – 8000 Hz): <45 dB SPL
Frequency Range....200 to 8000 Hz
Test Stimuli....tone, tone burst, pink noise, user supplied, calibrated or live speech, ISTS, filtered speech for verifying frequency-lowering instruments
Freq. modulation....sawtooth +/- 3% over 128 ms
Test stimulus levels for tones....40 - 85 dB SPL in 5 dB steps
Test stimulus accuracy at reference mic. for tones (200 - 2000Hz)....+/- 1.5 dB SPL
Test stimulus accuracy at reference mic. for tones (2000- 8000 Hz)....+/- 2.5 dB SPL
Equalization Method....pressure method (stored for open fittings)
Frequencies per octave (swept tones)....12
Frequencies per octave (tone burst)....3
Analysis bandwidth (speech, noise)....1/3 octave
Measurement accuracy at 1 kHz....+/- 1 dB
Measurement accuracy re 1 kHz
....+/- 1 dB (200-5000 Hz)
....+/- 2.5 dB (5000-8000Hz)
Battery drain resolution....+/- .01 mA
Measurement Range
....20-135 dB SPL (200-2500 Hz)
....30-140 dB SPL (2500-8000Hz)

**ANSI S3.46 - 1997 tests available**

Real-Ear Unaided Response.....Real-Ear Aided Response.....Real-Ear Occluded Response.....Real-Ear Insertion Gain

**Other tests available**

Speechmap® real-speech audibility measures.....On-ear harmonic distortion.....On-ear spectral analysis.....Manual measurement of output, gain, and distortion

**Fitting methods available**

Speechmap® with DSL 5.0a, NAL-NL1, NAL-NL2, CAMFIT
Insertion gain with NAL-RP, NAL-NL1, Fig6, PogoII, Berger, Libby

## Sensory Loss Simulator

Simulation types....Linear, conductive
....Non-linear outer hair cell cochlear loss
Simulation bands....65

Specifications subject to change without notice

CE ISO 13485

audioscan®
Hearing Instrument Fitting Systems

Etymonic Design Inc, 20 Ludwig St., Dorchester ON Canada N0L 1G4
Telephone (519) 268-3313 Fax (519) 268-3256 USA 800-265-2093