





- Audiometry
- REM/Live
  Speech Mapping
- Hearing Instrument Testing
  & Evaluation
- Tinnitus Assessment
- Video Otoscopy
- Hearing Instrument Vacuum



#### MedRx Gives You Choices. Choose the fit that's right for your practice.

#### The AVANT™ line of products consists of:

- 3 Dual Channel Audiometers ARC. Stealth and A2D+
- 3 REM/LSM Systems ARC, REM Speech+ and REMsp
- 1 Hearing Instrument Test Chamber

### MedRx also offers:

- 2 Video Otoscopes
- 1 Tinnitus Assessment System
- 3 Tympanometers
- 1 UltraVac



### 

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### EC REP

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HID (Human Interface Device) technology - choose any USB port and your computer will recognize the device consistently after initial installation



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Confidently track your patient's tinnitus with tools designed specifically for tinnitus

# MedRx Tinnometer





### **Tinnitus Features**

- Control the Level, Shape
  & Frequency
- Customized Stimulus and Reports
- Test Time Under 10 Minutes
- Save and Recall Sessions
- Quickly Pitch Match
- Testing Up To 16 kHz
- NOAH<sup>™</sup>, TIMS<sup>®</sup> and Sycle.Net<sup>™</sup> Compatible

### **Audiometer Features**

- Air Threshold Testing
- Automatic Air Audiometry
- 125 Hz 8 kHz
- USB Connection to Computer
- Small Footprint -Approx. 5" x 5" x 1.25"

## **Revolutionary Tinnitus Assessment**

The MedRx Tinnometer provides a whole new approach to tinnitus assessment. Confidently track your patient's tinnitus with tools designed specifically for tinnitus. Add recurring revenue with yearly tinnitus assessments. Track changes in tinnitus easily with NOAH<sup>™</sup> sessions. Generate customized reports specific to tinnitus assessments meeting Medicare requirements.

### **Air Audiometry**

The MedRx Tinnometer has air threshold capabilities allowing additional versatility. Use this product for community screenings where air thresholds are needed.

Fully Test, Fit & Counsel Patients with One Sleek, Lightweight Device

# AVANT\_ARC

Combining the Power of Audiometry, Real Ear Measurement & Live Speech Mapping in One Compact System

The AVANT ARC offers pure tone audiometry via earphones and bone conduction, masking and speech audiometry with SRT (Speech Recognition Threshold), WR (Word Recognition), SISI (Short Increment Sensitivity Index), ABLB (Alternate Binaural Loudness Balance) and Tone Decay Tests. Additional features are HLS (Hearing Loss Simulator), MHA (Master Hearing Aid), QuickSIN<sup>™</sup> testing and automated audiometry.

D30

The AVANT ARC features Live Speech Mapping plus all traditional Real Ear Measurements and includes targets for MSS (Modified Speech Spectrum), DSL v5.0, NAL-NL1 and NAL-NL2 as well as HLS (Hearing Loss Simulator) and MHA (Master Hearing Aid) Modules.

ti

Add the Revolutionary Tinnitus Assessment Module. (See page1)

### **Features**

- Complete Air, Bone, Speech and Masking Audiometry
- Binaural Real Ear Measurement and Live Speech Mapping
- Powerful 3rd Party Counseling Tools
- Built-In Special Tests, Word Lists
  and Auto-Scoring
- Integrated QuickSIN
- PC- based and Portable
- 2 x 20 W built-in Amplifiers
- Small Footprint -Approx. 8" x 5" x 1.25"
- USB Connection to Computer
- NOAH<sup>™</sup>, TIMS<sup>®</sup> and Sycle.Net<sup>™</sup> Compatible



# **AVANT Stealth**

## Compact and Powerful PC-Based Dual-Channel Clinical Audiometer

The AVANT Stealth clinical audiometer is a compact PC-based 2-channel audiometer, allowing multiple signal routing options utilizing cutting edge sound processing and sound generating technology.

This audiometer has an incredibly small footprint (approx.  $8'' \times 5'' \times 1.25'' - L \times W \times H$ ) and contains 2 x 20 watt built-in amplifiers and can be upgraded to include high frequency testing up to 20,000 Hz.

The AVANT Stealth is a powerful PC-based audiometer that allows fast and accurate air, bone and speech testing, has dedicated transducer outputs and offers an intuitive user interface for data collection, patient monitoring and counseling.

### **Features**

- Dual-Channel Clinical Audiometer with User-Selectable Signal Routing
- Complete Air, Bone, Speech and Masking Audiometry
- Built-in Special Tests, Word Lists and Auto-Scoring
- Integrated QuickSIN
- Automated Audiometry
- HLS (Hearing Loss Simulator) & MHA (Master Hearing Aid) for 3rd Party Demonstration
- PC- based and Portable
- USB Connection to Computer
- NOAH<sup>™</sup>, TIMS<sup>®</sup> and Sycle.Net<sup>™</sup> Compatible
- High frequency option allows testing up to 20 kHz

#### Add the Revolutionary Tinnitus Assessment Module. (See page 1)

The AVANT Audiometer software can run stand-alone or within NOAH

# AVANT A2D+



### **Features**

- Dual Channel Diagnostic Audiometer
- Complete Air, Bone, Speech and Masking Audiometry
- Built-in Special Tests, Word Lists and Auto-Scoring
- Integrated QuickSIN
- Automated Audiometry
- HLS (Hearing Loss Simulator) & MHA (Master Hearing Aid) for 3rd Party Demonstration
- PC- based and Portable
- USB Connection to Computer
- NOAH<sup>™</sup>, TIMS<sup>®</sup> and Sycle.Net<sup>™</sup> Compatible

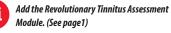
Dual Channel Diagnostic Audiometer

**Compact PC-Based** 

The AVANT A2D+ is a Dual Channel Diagnostic audiometer including Air, Bone, Speech and Masking functions.

It offers pure tone audiometry via earphones and bone conduction, masking and speech audiometry with SRT (Speech Recognition Threshold), WR (Word Recognition), SISI (Short Increment Sensitivity Index), ABLB (Alternate Binaural Loudness Balance), Tone Decay Tests, QuickSIN and Automated Audiometry.

The product is compact, Approx 6.5" x 5" x 1.25" (L x W x H), and when combined with a laptop is portable and easily configured for any office layout.



# AVANT REM Speech+



The AVANT REM Speech+ represents a new era of precision in-situ verification of hearing aids on both ears simultaneously.

In addition to Binaural Live Speech Mapping, the REM software supports all traditional Real Ear Measurements

The REM Speech+ system is cost effective, easy to connect and utilizes today's proven technology for maximum performance and accuracy.

### Features

- Binaural Real Ear Measurement and Live Speech Mapping System
- The AVANT REM Software includes targets for MSS (Modified Speech Spectrum), DSL v5.0, NAL-NL1 and NAL-NL2
- HLS (Hearing Loss Simulator) & MHA (Master Hearing Aid) for 3rd Party Demonstration
- 2 x 20 W built-in amplifiers
- PC-based and Portable
- USB Connection to Computer
- NOAH<sup>™</sup>, TIMS<sup>®</sup> and Sycle.Net<sup>™</sup> Compatible

# Ultimate Office+

### the A2D+ Audiometer in one convenient custom carrying case

The REM+ and



## Ultimate Office+ Package

The AVANT Ultimate Office combines the portability of the AVANT A2D+ air, bone and speech diagnostic audiometer with the AVANT REM Speech+ REAL EAR Measurement and Live Speech Mapping system in one custom carrying case.

Storage for all devices and accessories makes this "portable office" the preferred choice of professionals who conduct off-site testing.

Complete testing and verification in one compact case makes set-up quick, efficient and organized.





## The Complete Audiological Suite



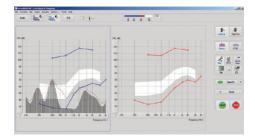
Plug In To Live Speech Mapping

# **AVANT REMsp**

## The smallest full Real Ear Measurement and Live Speech Mapping System

The REMsp performs all of the traditional Real Ear Measurements and features monaural Live Speech Mapping for an affordable price.





### **Features**

- Monaural Real Ear Measurement and Live Speech Mapping System
- Extremely compact design Approx. 3.25" x 1" x .75"
- The AVANT REM Software includes targets for MSS (Modified Speech Spectrum), DSL v5.0, NAL-NL1 and NAL-NL2
- HLS (Hearing Loss Simulator) & MHA (Master Hearing Aid) for 3rd Party Demonstration
- PC-based and Portable
- USB Connection to Computer
- NOAH<sup>™</sup>, TIMS<sup>®</sup> and Sycle.Net<sup>™</sup> Compatible



## **Otowave Tymps**

The MedRx Otowave 102, 202 & 202H offer a comprehensive range of screening and diagnostic Tympanometers

### **Features**

- Fast, accurate middle ear measurements
- Programmable 4-Frequency reflex test
- PC Interface; NOAH<sup>™</sup> and MedRx AVANT Impedance module
- Ergonomic design lightweight & portable
- Data Transfer to a PC via the MedRx software module and IR dongle

**Otowave 102** Screening Tympanometry This wireless hand-held Tympanometer with large screen provides 226 Hz probe tone impedance measurement including 4 acoustic reflex frequencies. Results are stored internally (up to 30 records). All data can be transfered to a PC via the MedRx software module and IR dongle.

The standard **Otowave 202** provides 226 Hz probe tone impedance measurements together with a user programmable range of both ipsi and contra lateral reflex test measurements at 500 Hz, 1 kHz, 2 kHz and 4 kHz.

The **Otowave 202-H** option features a comprehensive range of test functions including user defined 226 Hz and 1 kHz probe tone impedance measurements and a user programmable range of both ipsi and contra lateral reflex test measurements at 500 Hz, 1 kHz, 2 kHz and 4 kHz. A Scalar mode, Vector mode and Component mode display is available when using the 1 kHz Probe Tone.



# **AVANT HIT+**

### Hearing Instrument Test Chamber

The AVANT HIT+ represents a new era of precision Hearing Instrument Testing for your office. Compact yet rugged, this PC-based system is USB powered and performs 10 automated, selectable ANSI & IEC Tests. The device is small enough to be discreetly situated in any office setting. Its modern design complements the full line of AVANT instrumentation. The test results are automatically stored in NOAH<sup>™</sup> for convenient retrieval and can be printed on any printer.

Automated, selectable ANSI & IEC tests: OSPL-90; Full-On Gain; Reference Test Gain; Frequency Response; Equivalent Input Noise; Harmonic Distortion; Battery Current; Input/Output (AGC); Attack/Release; Induction Coil (SPLITS).

### **Features**

- Small footprint (Approx 9.5" x 9.8" x 6")
- 10 standard ANSI and IEC Hearing
  Instrument Tests
- Coupler & Reference Microphones, 2cc Coupler with Adapters, Set of 4 Battery Pills
- Customizable User/Test Protocols
- HID device True Plug and Play
- USB connection to computer
- Modern design
- NOAH<sup>™</sup>, TIMS<sup>®</sup> and Sycle.Net<sup>™</sup> Compatible

Store pictures in NOAH, retrieve results easily for followup visits showing the patients their progress.

# **Video Otoscopes**

MedRx Video Otoscopes Consist of: Otoscope Probe, High Resolution Color Camera, LED Light Handle or an External Light Source and Video Otoscope Software. User Friendly, NOAH<sup>™</sup> & TIMS<sup>®</sup> Compatible. An Integrated Video Module is Standard in all MedRx Software.

Choose from two MedRx Video Otoscopes with a patented lens/probe design that present ultra-clear, crisp images and require no focusing.

Choose from two MedRx Light Sources. The powerful external Standard Light Source or the built-in LED Light Handle.

### Analog Camera with Probe - Plug the Video



Otoscope straight into a monitor or connect to your computer via a USB Capture Dongle.

### The external (SLS) **Standard Light Source**

The SLS utilizes a 21 volt. 150 watt halogen bulb, fiber optic cable and a variable light intensity dial.



USB Camera with Probe - One USB Cable



Connection To Your Computer, Capture, View and Store Digital Images.

### The built-in LED Light Handle

The Video Otoscope Handle produces virtually no heat and comes with two sets of rechargeable batteries for portable use.



The MedRx Video Otoscope sets the clinical standard for precise imagery and archiving.



## Small, Powerful & Effective Hearing Instrument Vacuum

The UltraVac+ was designed to give dispensers and technicians a functional tool for repairing, restoring and maintaining hearing aids.

The device is small and effective in removing cerumen and debris from hearing aid tubing and ports. It offers vacuum and positive air flow simultaneously to get even the most stubborn wax out of hearing aids.

#### **Features**

- Digital display of chamber pressure and time remaining
- · Automatic detection of operating mode
- Separate pressure and vacuum wands minimize debris in system
- In-line vacuum filter for added reliability
- 4 minute drying chamber
- Auto shut off

The UltraVac+ System comes standard with 6 Assorted Vacuum Wand Tips plus a 4 Piece Toolkit





## MedRx Tinnometer



## **Technical Specifications**

Standards:	Screening Audiometer as per ANSI S3.6-2010, IEC 60645-1:2012, Type 4; Tone Audiometry, Tinnitus Assessment
Outputs:	Insert Earphones, DD45 Or DD450
Frequency Range:	Air: 125 Hz – 8 kHz
Tinnometer Frequency Range:	Air: 125 Hz — 16 kHz
Max Output:	Air Conduction: 100 dB HL For Mid-Range Frequencies,
Attenuation:	1 dB Step Or 5 dB Step, User Selectable
Optional Accessories:	DD45 Headphones & Insert Earphones
Compatible with:	NOAH <sup>™</sup> , TIMS <sup>®</sup> and SycleNet <sup>™</sup>
Power Requirements:	USB-powered
Dimensions:	Approx. 5″ x 5″ x 1″ (L x W x H) Approx 12 cm x 12 cm x 3 c m (W x D x H)
Net Weight:	< 1 lbs • < 500 g
Standard Accessories:	DD450, Patient Response Switch, Talkback Microphone, Operator Mic, Monitor Headset, Software & Manuals, Carrying Case

## AVANT ARC

### **Technical Specifications**

#### **REAL EAR MEASUREMENT**

The Device Meets or exceeds all tests required in the ANSI 53.46-1997 Methods of Measurement of Real-Ear Performance Characteristics of Hearing Aids, along with the requirements of IEC/EN 61669:2001.

Probe Microphones (L/R):	Dual Electret Microphone Elements
Probe Microphone Tube:	Silicone 1.0 mm Nominal Diameter
Measurement Range:	40-120 $\pm$ 3 dB SPL
Measured Frequency Range:	125-8000Hz
Test Stimuli:	Broadband Noise and Synthesized Random Noise - Pink, White, Byrne LTASS and ANSI weighted; ICRA; ISTS Microphone, File, CD-ROM for Live Speech Mapping, Chirp
Test Stimulus Levels at 1m:	40-90 dB SPL in 1 dB Steps – 200Hz through 8K Hz (depending on speaker wattage and efficiency)
Test Stimulus Accuracy:	$\pm$ 3dB SPL
Equalization:	Pressure Method
Analysis Mode:	User Selectable 1/3, 1/6, 1/9, 1/12, 1/24, 1/48 Octave Bands
ANSI S3.46-1997 Test Available IEC/EN 61669:2001:	Real Ear Unaided Response, Real Ear Unaided Gain, Real Ear Insertion Gain, Real Ear Occluded Response, Real Ear Occluded Gain, Real Ear Aided Response, Real Ear Aided Gain
Other Test Available:	Live Speech Mapping™ with Peaks and LTAS analysis; Real Ear to Coupler Difference, Occlusion Effect, Percentile Analysis
Prescription Methods:	NAL-RP, 1/3 Gain, 1/2 Gain, Berger, Pogo 1, Pogo 2, FIG6, DSL m[I/O], NAL-NL1, NAL-NL2
Probe Monitoring:	Available with Operator Headset
REM EXTERNAL CONNECTIONS	
Power connection:	USB 2.0 input 5.0 Volt Bus
USB 2.0 input:	Standard USB "B" socket
Line-Output jack (REM or Audiometry Speakers):	3.5mm Stereo Jack
Speaker Output (Internal Amplifier) (2):	3.81mm Pluggable Spring Clamp
Probe Microphones inputs (2):	8 pin Mini-DIN
Operator Headset Jack (REM or Audiometry):	3.5mm Stereo Jack
Patient Headset Jack (Client):	3.5mm Stereo Jack
Power Jack:	2.1mm X 5.5mm
HEARING LOSS SIMULATOR AND H	EARING AID SIMULATOR

Software based sound equalization with available Live Speech Mapping functionality. Frequency Range 125Hz – 8000 Hz, 13 Band Equalizer

AUDIOMETRY		
Standards: Clinical Audiometer as per ANSI S3.6-2010 Type 2 AE (IEC 60645-1 & 2), Tone Audiometry, Speech Audiometry, Stenger Test, QuickSIN <sup>™</sup> , ABLB, SISI, Tone Decay, Automated Audiometry		
Channels:	Two channels	
Outputs:	IP30 Insert Earphones, EAR 3A <sup>®</sup> Insert Earphones or TDH 39 Headphones (DD45), B71 Bone Conductor, Free Field- Line Level Output or Internal Amplifier	
Tone Stimuli:	Pure Tone, Warble Tone, Continuous or Pulsed, Warble modulation frequency and Pulse period are user adjustable.	
Masking Signals:	Tone Audiometry: Narrow Band Noise (default), Speech Weighted Noise, White Noise. Speech Audiometry: Speech Weighted Noise (default), White Noise, External Recorded (opposite channel).	
Frequency Range		
USB Power only:	Air: 125Hz – 8000Hz (limited 8000Hz to 12500Hz available) Bone: 250Hz – 8000Hz	
Sound Field:	125Hz – 8000Hz (Line Level)	
Acoustic Distortion:	< 1.0% at 500 Hz, 100dB SPL	
Noise Floor:	< -10dB HL from 125 Hz – 8000 Hz (12500 Hz)	
Attenuation:	1dB or 5dB steps, user selectable	
Minimum / Maximum Output:	-10 dB to 120 dB HL at 1 KHz – Air (¼ inch mono jacks), -10 dB to 75 dB HL at 1 KHz – Bone (¼ inch mono jack)	
Free Field Output:	Frequency Range 125-8,000 Hz, Dynamic Range 60-90+ dB SPL at 1 meter distance, (Using 50 watt stereo amplifier with 89 dB sensitivity speakers)	
Speech Input:	Microphone (3.5 mm stereo jacks)	
I/O Jacks - 3.5mm:	Operator Headphones (output shared with REM), Operator Talk Forward Microphone, Patient Talk Back Microphone, Free Field (Line Out shared with REM)	
I/O Jacks – 1/4":	Left Air Conduction, Right Air Conduction, Bone Conduction,Patient Response Switch	
POWER (FOR BOTH REM AND AUDIOMETRY)		
USB 2.0 Input:	5.0 Volt Bus	
Max Power Consumption:	Less than 500 mA at 5.0 volts	
Power Supply Internal Speaker Amp:	15V DC, 2A	
Optional Powered Speakers:	120V, 60 Hz or 100V — 240V, 50/60 Hz available	
Dimensions:	Approx 8″ x 5″ x 1.25″ (L x W x H) Approx 20cm x 12cm x 3cm (L x W x H)	

< 2 lbs • < 1kg

Call Today! 888-392-1234

Weight:

# AVANT Stealth



## **Technical Specifications**

Standards:	2-Channel Clinical Audiometer as per ANSI S3.6-2010, IEC 60645-1:2012, IEC 60645- 2:1993, IEC 60645-4:1994, Type 1 HFAE; Tone Audiometry, Speech Audiometry, Stenger Test, QuickSIN™, ABLB, SISI, Tone Decay, Automated Audiometry
Options:	Automated Audiometry, High Frequency Audiometry
Outputs:	Insert Earphones, TDH 39, DD45 Or HDA 300 Headphones, Bone Conductor, Free Field via High Power Internal Amplifiers, 2x20 Watts Into 4 Ohms
Frequency Range:	Air: 125 Hz - 8000 Hz, Bone: 250 Hz - 8000 Hz, Optional: High Frequency Range With Sennheiser HDA 300 Headphones: 8000 Hz - 20,000 Hz
Maximum Output:	Air Conduction: 120 dB HL For Mid-Range Frequencies, Bone Conduction: 70 dB HL, Sound Field: 95 dB HL (depends on speakers)
Attenuation:	1 dB Step Or 5 dB Step, User Selectable
Speech Input:	Live Microphone, MP3/Wave Files, CD
Communication Port:	USB 2.0 (Backward Compatible With 1.1)
Masking Signals	
Tone Audiometry:	Narrow Band Noise (default), Speech Weighted Noise, White Noise
Speech Audiometry:	Speech Weighted Noise (default), White Noise, CD/File, Opposite Channel
Hearing Loss Simulator and Hearing Instrument Simulator:	Frequency Range: 125 Hz - 8000 Hz, 13 Band Equalizer.
Optional Accessories:	TDH 39 or DD45 Headphones & DD450 (High Freq. Headphones)
Compatible:	NOAH <sup>TM</sup> , TIMS <sup>®</sup> and Sycle.Net <sup>TM</sup>
Power Requirements:	USB-powered or External Power DC 15 V/2A
Power Supply:	100V - 240V, 50/60 Hz
Dimensions:	Approx 8" x 5" x 1.25" (L x W x H) • Approx 20cm x 12cm x 3cm (L x W x H)
Weight:	< 2 lbs • < 1kg
Standard Accessories:	Insert Earphones or DD45 Headphones, Bone Conductor, Patient Response Switch, Talkback Microphone, Operator Mic / Monitor Headset, Speaker Outputs, Auditec Sound File License USB Cable, Software & Manuals, Carrying Case



# AVANT A2D+

## **Technical Specifications**

Standards:	ANSI S3.6-2010, Type 2 AE (IEC 60645-1&2) Tone Audiometry, Speech Audiometry, Stenger Test, QuickSIN™, ABLB, SISI, Tone Decay, Automated Audiometry
Channels:	Two Channels
Outputs:	Insert Earphones or TDH39 Headphones (DD45). B71 Bone, Conductor, Free Field - Line Level Output
Tone Stimuli:	Pure Tone, Warble Tone, Continuous Or Pulsed. Warble Modulation Frequency And Pulse Period Are User Adjustable
Masking Signals:	Tone Audiometry: Narrow Band Noise (Default), Speech Weighted Noise, White Noise. Speech Audiometry: Speech Weighted Noise (Default), White Noise, External Recorded (Opposite Channel)
Frequency Range USB Power Only:	Air: 125Hz – 8000 Hz (limited 8000 Hz to12500 Hz available) Bone: 250Hz – 8000Hz Sound Field: 125 Hz - 8000 Hz (Line Level)
Acoustic Distortion:	< 1.0% At 500 Hz, 100dB SPL
Noise Floor:	< -10dB HL From 125 Hz-8000 Hz
Attenuation:	1dB Or 5dB Steps, User Selectable
Minimum / Maximum Output:	-10 dB To 120 dB HL At 1 KHz — Air (¼ Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz — Bone (¼ Inch Mono Jack)
Free Field Output:	Frequency Range 125 Hz - 8000 Hz, Dynamic Range 60-90+ dB SPL At 1 Meter Distance, (Using 50 Watt Stereo Amplifier With 89 dB Sensitivity Speakers)
Speech Input:	Microphone (3.5 mm Stereo Jacks)
I/O Jacks - 3.5mm:	Operator Headphones (Output), Operator Talk Forward Microphone, Patient Talk Back Microphone, Free Field (Line Out)
I/O Jacks – 1/4″:	Left Air Conduction (2), Right Air Conduction (2), Bone Conduction, Patient Response Switch
Communication Port:	USB (Provides All Device Power)
Power Requirements:	USB Power +5 Volts DC, Less Than 500mA
Dimensions:	Approx 6.5" x 5" x 1.25" (L x W x H) • Approx 16cm x 12cm x 3cm (L x W x H)
Weight:	< 1 lb • < 500 g
Standard Accessories:	Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable, Software & Manuals, Carrying Case

# AVANT REM Speech+



## **Technical Specifications**

Probe Microphones (L/R):	Dual Electret Microphone Elements (2 Probe Microphones)	
Probe Microphone Tube:	Silicone 1.0 mm Nominal Diameter	
Measurement Range:	40 - 120 ± 3 dB SPL	
Measurement Frequency Range:	125-8000Hz	
Test Stimuli:	Broadband Noise and Synthesized Random Noise - Pink, White, Byrne LTASS and ANSI weighted; ICRA; ISTS; Microphone, File, CD-ROM for Live Speech Mapping , Chirp	
Test Stimulus Levels at 1m:	45 - 90 dB SPL in 1 dB Steps (depending on speaker wattage & efficiency)	
T <del>e</del> st Stimulus Accuracy:	± 3 dB SPL	
Equalization:	Pressure Method	
Analysis Mode:	User Selectable 1/3, 1/6, 1/12, 1/24, 1/48 Octave Bands	
ANSI S3.46-1997 Test Available IEC/EN 61669:2001:	Real Ear Unaided Response, Real Ear Unaided Gain; Real Ear Insertion Gain; Real Ear Occluded Response; Real Ear Occluded Gain; Real Ear Aided Response; Real Ear Aided Gain	
Other Test Available:	Live Speech Mapping with Peaks and LTASS analysis; Real Ear to Coupler Difference, Occlusion Effect, Percentile Analysis, 3D Speech Mapping and MPO Testing	
Prescription Methods:	NAL-RP; 1/3 Gain; 1/2 Gain; Berger; Pogo 1; Pogo 2; FIG6; DSL m[I/O] NAL-NL1; NAL- NL2	
External Connections:	Power Connection USB 2.0 Input 5.0 Volt Bus; Line Output Jack (Speakers) 3.5 mm Stereo Jack; Speaker Output (Internal Amplifier) (2) 3.81mm Pluggable Spring Clamp; Probe Microphones Inputs (2) 8 Pin Mini-DIN; Operator Headset Jack 3.5 mm Stereo Jack; Patient Headset Jack 3.5 mm Stereo Jack; Power Jack 2.1 mm X 5.5 mm.	
Dimensions:	Approx 6.5" x 5" x 1.25" (L x W x H) • Approx 16cm x 12cm x 3cm (L x W x H)	
Weight:	< 1 lb • <500 g	
Standard Accessories:	Sure -Probe™ Microphone System with Lighted Visual Cues (2 Probe Microphones), 2 Headphones, 1 Powered Speaker, Carrying Case, USB Cable, Probe Tubes, Protective Probe Microphone Storage Box, External Power Supply for Internal Stereo Speaker Amplifier. Optional RECD Coupler	



## AVANT REMsp

## **Technical Specifications**

Probe Microphones (L/R) :	Dual Electret Microphone Elements (One Probe Microphones)	
Probe Microphone Tube :	Silicone 1.0 mm Nominal Diameter	
Measurement Range :	45 - 110 ± 3 dB SPL	
Measurement Frequency Range:	125 - 8000Hz	
Test Stimuli :	Broadband Noise and Synthesized Random Noise - Pink, White, Byrne LTASS and ANSI weighted; ICRA; ISTS; Microphone, File, CD-ROM for Live Speech Mapping, Chirp	
Test Stimulus Levels at 1m:	45 - 90 dB SPL in 1 dB Steps (depending on speaker wattage & efficiency)	
Test Stimulus Accuracy:	± 3 dB SPL	
Equalization :	Pressure Method	
Analysis Mode :	User Selectable 1/3, 1/6, 1/12, 1/24, 1/48 Octave Bands	
ANSI S3.46-1997 Test Available IEC/EN 61669:2001:	Real Ear Unaided Response, Real Ear Unaided Gain; Real Ear Insertion Gain; Real Ear Occluded Response; Real Ear Occluded Gain; Real Ear Aided Response; Real Ear Aided Gain	
Other Test Available :	Live Speech Mapping with Peaks and LTASS analysis; Real Ear to Coupler Differ- ence, Occlusion Effect, Percentile Analysis, 3D Speech Mapping and MPO Testing	
Prescription Methods :	NAL-RP; 1/3 Gain; 1/2 Gain; Berger; Pogo 1; Pogo 2; FIG6; DSL m[I/O] NAL-NL1; NAL-NL2	
External Connections :	Power Connection USB 2.0 Input 5.0 Volt Bus $\pm$ 0.2 Volts, "A" Plug; Line-Output Jack (Speakers) 3.5 mm Stereo Jack (0.15 AC Volts RMS, Min. at 1 kHZ); Probe Microphone Permanently Connected.	
Dimensions :	Approx 3.25″ x 1″ x .75″ (L x W x H) • Approx 8.3 cm x 2.5 cm x 2.0 cm (L x W x H)	
Weight:	< 4 oz • <120 g	
Standard Accessories:	Sure-Probe™ Microphone with Lighted Visual Cue and Adjustable Loop, 1 Powered Speaker, Carrying Case, USB Extender Cable, Probe Tubes, Protective Probe Microphone Storage Box, Optional RECD Coupler	

# Otowave Tymp



## **Technical Specifications**

A. T 443.4		
Otowave Tymp 102-4 Tympanometry Measurements:	Probe Tone Levels: 226 Hz $\pm$ 2%, 85 dBSPL $\pm$ 2 dB, over range 0.2 ml to 5 ml	
Pressure Range:	+200 daPa to -400 daPa $\pm$ 10 daPa	
Ear Volume Measurement Range:	0.2 ml to 5 ml $\pm$ 0.01 ml or 10 % (whichever is larger) over entire range	
Reflex Measurement Range Reflex DB Range:	500 Hz, 1 kHz, 2 kHz, 4 kHz Frequency $\pm$ 0.1 % 85 to 100 dbHL (programmable in 5 or 10 dB steps)	
Reflex Measurement Range:	0.01 ml to 0.5 ml $\pm$ 0.01 ml configurable in 0.01 ml steps	
Standards:	SafetyIEC 60601-1; EMC IEC 60601-1-2ImpedanceIEC 60645-5 Type 2 Tympanometer ANSI 3.39CE MarkComplies to EU Medical Device Directive	
Power:	Battery 4 x Alkaline AA cells or 4 x NiMH (<=2.3Ah) rechargeable	
Dimensions:	Approx. 8" x 3" x 1" (L x W x H) • Approx. 21 cm x 8 cm x 4 cm (L x W x H)	
Weight:	Approx < 1 lb • < 380 Gram	
Standard Accessories 102-4:	Rugged Transportable Carrying Case, Test Cavities, Set of Disposable Eartips,4 x 1.5V Rechargeable NIMH Batteries, Battery Charging System, Operator's Manual. Optional Accessories: Wireless IR Printer, Infra-red USB Adapter	
Otowave Tymp 202-202H Tympanometry Measurements:	Probe Tone Levels: 226 Hz $\pm$ 2%, 85 dB SPL $\pm$ 2 dB 1000 Hz $\pm$ 2%; 79 dB SPL $\pm$ 2 dB (202-H only) over ear canal volume range	
Pressure Range:	$+200$ daPa to -400 daPa $\pm$ 10 daPa or $\pm$ 10% (whichever is larger) over range 0.1ml to 5ml	
Ear Volume Measurement Range:	226 Hz: 0.2 ml to 5 ml ; 1000 Hz: 0.1 ml to 5ml $\pm$ 0.1ml or $\pm$ 5% (whichever is larger)	
Reflex Measurement Range Reflex DB Range:	lpsilateral and contralateral or both User-selectable from: 500 Hz, 1 kHz, 2 kHz and 4 kHz $(\pm 2 \%)$ Reflex levels: Ipsilateral: 70 dBHL to 110 dBHL $(\pm 3$ dB) Contralateral: 70 dBHL to 110 dBHL $(\pm 3$ dB)	
Reflex Measurement Range:	0.01 ml to 0.5 ml $\pm$ 0.01ml configurable in 0.01ml steps	
Standards:	SafetyIEC 60601-1;EMC IEC 60601-1-2ImpedanceIEC 60645-5 Type 2 Tympanometer ANSI 53.39CE MarkComplies to EU Medical Device Directive	
Power:	Mains: 100-240 VAC; 50/60 Hz via mains adapter (approved in medical safety standards); Batteries: 4 x AA (either Alkaline or NiMH, the latter recharged external to the instrument )	
Dimensions:	Base unit: Approx. 8" x 3" x 1" (L x W x H) • Approx 19 x 8.5 x 4 cm (excluding connections) Probe: Approx. 5" x 1" • Approx 13 x 2.5 cm (max.) diameter	
Weight:	Base unit: 11.6 oz • 330 g (without batteries, using mains power), 15 oz • 430 g (with batteries), Probe: 3.8 oz • 110 g (incl. connecting cable)	
Standard Accessories 202-202H:	Test cavities, 4 x 1.5 V Alkaline AA batteries, Contralateral transducer, Set of disposable ear tips, Carrying Case, MedRx NOAH impedance module, USB cable, Mains adapter, Operating Manual	

## AVANT HIT+

## **Technical Specifications**

Standards:	Hearing Aid Analyzer As Per ANSI S3.22-2009, IEC 60118-7:2005	
Speaker Output:	Max 95 dB SPL	
Frequency Range:	125 Hz - 8000 Hz $\pm$ 0.5%	
Coupler Mic:	Max Input Level: 140 dB SPL	
Reference Mic:	Omni Directional Microphone	
Battery Simulator Output:	Adjustable Output Voltage: 0.1V - 1.5V In 100mV Steps Accuracy $\pm$ 5% Current Measurement: 20uA - 20mA Accuracy $\pm$ 5% Battery Pills Provided: 10A, 13, 312 And 675	
Magnetic Loop:	31.6mA/m Magnetic Strength, Per ANSI Standard	
Communication Port:	USB	
Power Requirements:	USB Power	
Dimensions:	Approx 9.5" x 9.8" x 6" (W x D x H) Approx 24 cm x 25 cm x 15c m (W x D x H)	
Net Weight:	< 7 lbs • < 4 kg	
Enclosure:	Acoustically Dampened Enclosure, 15dB Minimum Attenuation	
Environmental Requirements:	Working Temperature Range From 50°F To 95°F • 10° To 35° C	
Standard Accessories:	Battery Pill Set, 2cc Coupler with Adapters, USB Cable, Hex Wrench, O-Ring, 25mm Tube, Foam Pads, Blue Tack	
Automated, Selectable ANSI & IEC tests:	OSPL-90; Full-On Gain; Reference Test Gain; Frequency Response; Equivalent Input Noise; Harmonic Distortion; Battery Current; Input/Output (AGC); Attack/Release; Induction Coil (SPLITS)	

# Video Otoscope



## **Technical Specifications**

USB Camera	
Image Sensor:	1/3" Interline XGA Color
	Progressive CCD: ICX204AK (Sony)
Effective Picture Element:	1024 (H) x 779 (V)
Chip Size:	5.80 (H) x 4.92 (V) mm
Cell Size:	4.65 (H) x 4.65 (V) μm
Scanning System:	Progressive
Resolution:	1024 (H) x 768 (V) (Full Scanning) 1024 (H) x 344 (V) (1/2
Maximum Frame Rate	
Full Scanning:	29.18 fps (Normal) / 14.59 fps (1/2 clock) / 7.295 fps (1/4 clock)
Pixel Frequency:	29.5 MHz (Normal) / 14.75 MHz (1/2 clock) / 7.375 MHz (1/4 clock)
Video Output:	8bit / 10bit / 12bit
Minimum Scene Illumination 21 Lux @ F1.2:	
Sync System:	Internal
Electronic Shutter:	Auto / Manual (Software Selectable)
Normal:	1/29,500,000 ~ 1/29.18 seconds
Gain:	Auto / Manual (Software Selectable)
Gamma:	Manual (Software Selectable)
White Balance:	Auto / Manual / One shot
	(Software Selectable)
Input / Output:	USB 2.0 High Speed
Power	
Input Voltage:	+5 Vdc through USB connector (+4.4 ~ +5.25V)
Consumption:	< 300 mA
Dimensions:	28 mm x 28 mm x 37 mm (W x H x D)
Lens Mount:	CS Mount
Environmental	
Weight:	Approx. 45g
Interface Connector :	USB: mini-B USB connector IO signal: 6pin connector (HR10A-7R-6PB or equivalent)
Temperature Operational:	0 ~ 40°C
Storage:	-30 ~ 65°C
RoHS:	RoHS Compliant

Analog Camera	
Image Sensor:	1/3" Interline CCD ICX638BKA
Active Picture Element:	768 (H) x 494 (V)
Signal Format:	NTSC
Scanning System:	2:1 Interlace
Scanning Frequency:	Horizontal Frequency 15.734kHz, Vertical Frequency 59.94Hz
Sync System:	Internal / External
Horizontal Resolution:	480 TV Lines
S/N Ratio:	More than 48 dB (AGC = off)
Video Output Format:	VBS 1.0 Vp-p, 75 Ω, Y/C
Minimum Scene Illumination:	0.11 lx, F1.2 (AGC=ON)
Electronic Shutter:	
Dip Switch:	1/60 (1/50PAL), 1/125, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000 usec
Auto/Control Software:	High Speed Shutter: 1/60(1/50:PAL), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/10000 sec
Auto/Control Software:	Low Speed Shutter: 1 to 256FLD (Configurable through the control software)
White Balance:	Auto / Push to Set/ Manual (Configurable through the control software)
Auto IRIS:	Not supported
AGC (Automatic Gain Control):	On / Off
Gamma:	0.45/1.0 (Switchable, Con- figurable through the control software), Defalut:0.45
Image Rotation:	Normal (Default),Horizontal Flip, Vertical Flip, Horizontal Vertical Flip
Still Image:	Supported
Lens Mount:	CS Mount
Optical LPF:	IR cut filter
Input Voltage:	DC9V~15V
Consumption:	80mA ± 20mA
Operating Temperature:	-10 ~ 50°C
Storage Temperature:	-30 ~ 65°C
Dimensions:	51 (W) x 51 (H) x 60.5 (D) mm
Weight:	Approx. 190g
RoHS:	RoHS Compliant



# MedRx UltraVac+

## **Technical Specifications**

Power Requirements:	100V - 240V, 50/60 Hz
Power Consumption:	<100 Watts
Fuse:	1.25 amp SB 5 x 20 mm
Operating Temperature:	32° TO 120° F • 0° TO 50° C
Weight:	Approx 11 lbs • Approx 5 kg
Dimensions:	Approx 11" x 10.5" x 6.5" (L x W x H) • Approx 28 cm x 26 cm x 16 cm (L x W x H)
Debris Filter:	I-35S
Vacuum Tips:	#14, #15, 2-#18 and 2-#20 gauge with Safety Lock attachment
Drying Chamber Cycle Time:	4 minutes with auto shut-off
Vacuum Wand:	Constant
Standard Accessories:	Drying Chamber Cup, Particulate Filter, 6 Vacuum Wand Tips, Four Piece Tool Kit













# Innovation, Continuity, Reliability.

MedRx, Inc. is a U.S. based global manufacturer and developer of advanced computerized diagnostic and hearing instrument fitting technologies, specifically designed for the hearing care professional. MedRx has created a remarkable new generation of discreet, yet powerful PC-based instrumentation for Audiometry, Real Ear Measurement, Live Speech Mapping, Hearing Instrument Testing & Evaluation and Video Otoscopy.



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#### MedRx Minimum Computer Specs:

Windows<sup>®</sup>- PC compatible computer, Intel<sup>™</sup> Dual Core, 1.8 GHz or better. 2 GB RAM. 5 GB free hard drive space. Available 2.0 USB port. Windows 7, 8 or 10 Professional (32 or 64-bit).