



Diagnostic & Hearing Instrument Fitting Technologies

CATALOG





Good Things Come In Small Packages

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



AVANT ARC

Audiometry, Real Ear Measurement & Live Speech Mapping In One Impressive System



The AVANT ARC combines the power of PC-based Audiometry with the fitting and counseling benefits of REM & Live Speech Mapping into one compact device.

This system provides the professional with the tools needed to fully test, fit and effectively counsel patients and 3rd-parties in a sleek, portable, lightweight design.



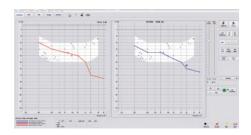
Fully Test, Fit and Counsel Patients with One Sleek, Lightweight Device

ARC Software

For loading software, the ARC is designed around a common HID protocol, which automatically recognizes and loads drivers when plugged into any USB port

- no more dedicated ports and drivers to load manually.

This unique system is NOAH™, TIMS®, Blueprint OMS and Sycle.Net™ compatible.



AVANT ARC- Audiometry

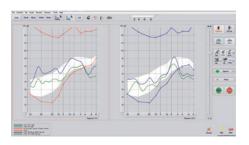
Available Tests

The 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) and MHA (Master Hearing Aid), QuickSIN™ testing, Automated Audiometry and Tinnometer tinnitus assessment.

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.





AVANT ARC— Live Speech Mapping including MSS target (other available targets; DSL v5.0, NAL-NL1 and NAL-NL2)

AVANT ARC in short:

- 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
- Integrated Tinnometer Tinnitus Assessment Module
- · PC- based and Portable
- 2 x 20 W built-in Amplifiers
- HID device True Plug and Play
- Small Footprint Approx. 20 cm x 12 cm x 3 cm (L x W x H)
- USB Connection to Computer
- NOAH™, TIMS®, Blueprint OMS and Sycle.Net™
 Compatible

Counseling Tools (HLS/MHA)

Hearing Loss Simulator (HLS) demonstrates the effect of the client's hearing loss for the spouse or family member. The program attenuates an input signal to simulate the severity of the loss for the third party. Master Hearing Aid (MHA) demonstrates the benefits of amplification to an inexperienced user. Using these tools can empower the patient and third party to make informed decisions about their hearing healthcare.





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. 20,3 x 12,7 x 3,2 cm - L x W x 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, accurate air, bone and speech testing, has dedicated transducer outputs and offers an extremely intuitive user interface for data collection, patient monitoring and counseling.



AVANT Stealth in short:

- 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
- Integrated Tinnometer Tinnitus Assessment Module
- Automated Audiometry
- HLS (Hearing Loss Simulator) & MHA (Master Hearing Aid) for 3rd Party Demonstration
- PC- based and Portable
- HID device True Plug and Play
- NOAH™, TIMS®, Blueprint OMS and Sycle.Net™ Compatible
- High frequency option allows testing up to 20 kHz





AVANT A2D+

Compact PC-Based Dual Channel Diagnostic Audiometer

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, Hughson Westlake Automated Audiometry and Tinnometer tinnitus assessment.

The product is compact, Approx. 16.5 cm x 12.7 cm x 3.2 cm (L x W x H) and when combined with a laptop is portable and easily configured for any office layout.



AVANT A2D+ in short:

- · Dual Channel Audiometer
- Air, Bone, Speech and Masking Functions
- Powerful 3rd Party Counseling tools
- Built-in Special Tests, Word Lists and Auto-Scoring
- Integrated QuickSIN
- Integrated Tinnometer Tinnitus Assessment Module
- · Automated Audiometry
- HID device True Plug and Play
- · PC Based via USB Connection
- NOAH™, TIMS®, Blueprint OMS and Sycle.Net™ Compatible







AVANT AIR+

PC-Based Screening Audiometer



The MedRx AVANT AIR+ has air threshold capabilities allowing additional versatility. The small footprint makes it an ideal air audiometer for traveling. Use this product for community screenings where air thresholds are needed.

AVANT AIR+ in short:

- · Air Threshold Testing
- Automatic Air Audiometry Testing
- 125 Hz 8 kHz
- Small Footprint Approx. 12cm x 12cm x 3cm
- PC Based via USB Connection
- HID device True Plug and Play
- NOAH[™], TIMS[®], Blueprint OMS and Sycle.Net[™] Compatible

Standard Accessories

- Headphones
- Operator Mic / Monitor Headset
- · Patient Response Switch
- Talkback Microphone
- USB Cable, Software & Manuals
- Carrying Case





MedRx Tinnometer

Revolutionary Tinnitus Assessment

Tinnitus in short:

- 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
- HID device True Plug and Play
- NOAH™, TIMS®, Blueprint OMS and Sycle.Net™ Compatible

Audiometer in short:

- · Air Threshold Testing
- Automatic Air Audiometry
- 125 Hz 8 kHz
- USB Connection to Computer
- Small Footprint Approx. 12cm x 12cm x 3cm

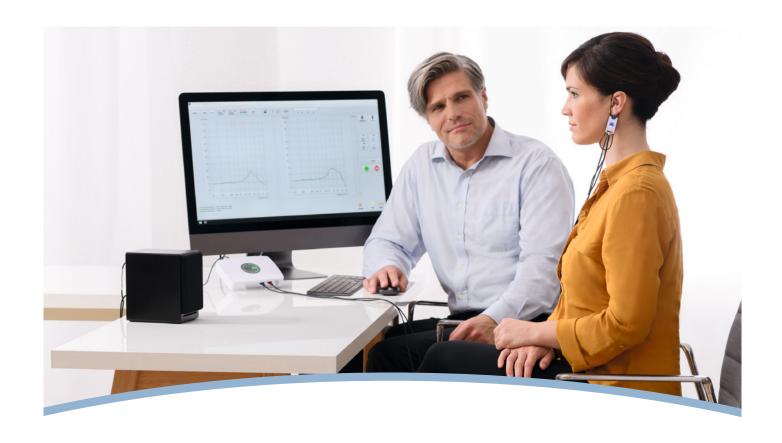


Tinnitus Assessment

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™ sessions. Generate customized reports specific to tinnitus assessments meeting Medicare requirements.

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





AVANT REM Speech+

Complete PC-Based Real Ear Measurement Live Speech Mapping System

AVANT REM Speech+ in short:

- Binaural Real Ear Measurement,
 Live Speech Mapping, 3D Speech Mapping,
 Percentile Analysis
- · Compact design portable
- 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
- HID device True Plug and Play
- USB-powered and PC-based
- NOAH™, TIMS®, Blueprint OMS and Sycle.Net™
 Compatible



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.





Ultimate Office+

The Complete Audiological Suite



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 transportable 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 setup quick, efficient and organized.





AVANT REMsp

The smallest full Real Ear Measurement & Live Speech Mapping System

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



AVANT REMsp in short:

- Monaural Real Ear Measurement, Live Speech Mapping, 3D Speech Mapping, Percentile Analysis
- Extremely compact design (approximately 2.5 cm x 7.6 cm)
- 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
- USB-powered and PC-based
- NOAH[™], TIMS[®], Blueprint OMS and Sycle.Net[™] Compatible





Otowave Tymp

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

Otowave Tymp in short:

- · Fast, accurate middle ear measurements
- Programmable 4-Frequency reflex tests
- PC Interface; NOAH™ 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 1000Hz 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 and is designed to provide many years of reliable service. The test results are automatically stored in NOAH™ 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)

AVANT HIT+ in short:

- Small footprint Approx. 24 cm x 25 cm x 16 cm (L x W x H)
- 10 standard ANSI and IEC Hearing Instrument Tests
- Including Coupler & Reference Microphones, 2cc Coupler with Accessories, Set of 4 Battery Pills
- Customizable User/Test Protocols
- HID device True Plug and Play
- USB connection to computer
- · Modern design
- NOAH[™], TIMS[®], Blueprint OMS and Sycle.Net[™] Compatible







Video Otoscopes

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

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



Analog Camera with Probe

Plug the Video Otoscope straight into a monitor or connect to your computer via a USB Capture Dongle



USB Camera with Probe

One USB Cable Connection To Your Computer. Capture, View and Store Digital Images Choose from two MedRx Light Sources. The powerful external Standard Light Source or the battery operated LED Light Handle



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



The built-in LED Light Handle

The 360° rotatable Video Otoscope Handle produces virtually no heat and comes with two sets of rechargeable batteries





UltraVac+

Hearing Instrument Vacuum & Drying Chamber

The UltraVac+ is easy to use — which makes it ideal for those who may just be getting started but powerful enough for the demands of the most experienced technician.

UltraVac+ in short:

- 4 minute Drying Chamber cycle with auto shut off
- Display panel indicates the vacuum level of the Drying Chamber and time remaining during use
- Separate Pressure and Vacuum Wands work simultaneously
- In-line Vacuum Hose filter minimize debris in the system
- · Easy to use and easy to keep clean

Functions of your UltraVac+

The Drying Chamber – Displaces moisture trapped within the hearing instruments. You can place two ITEs, or one BTE with an earmold, into the chamber at one time.

The Vacuum Wand — Used to extract ear wax and debris from the receiver tubes, microphone tubes, vents and battery compartments of the hearing instruments.

The Pressure Function — Used to blow air through the Pressure Wand to clear obstructed Vacuum Wand Tips and to blow debris from the receiver tubes, microphone tubes, vents and battery compartments of the hearing instruments.

The Vacuum & Pressure Wands work simultaneously.





AVANT ARC

Technical Specifications

REAL	EAR	MEASU	REMENT
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The Device Meets or exceeds all tests required in the ANSI S3.46-1997 Methods of Measurement of Real-Ear Performance Characteristics of Hearing Aids, along with the requirements of IFC/FN 61669-2001

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 ± 3 dB SPL	
Measured Frequency Range:	125-12.500 Hz	
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:	± 3dB SPL	
Equalization:	Pressure Method	
Analysis Mode:	User Selectable 1/3, 1/6, 1/9, 1/12, 1/24, 1/48 Octave Bands	
ANSI 53.46-1997 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 Differ- ence, 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 HEARING	AID SIMULATOR	
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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™, ABLB, SISI, Tone Decay, Hughson Westlake Automated Audiometry

Channels:	Two channels
Outputs:	IP30 Insert Earphones, EAR 3A® Insert Earphones or TDH 39 Headphones (DD45), B81 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 AUDIOMETR	Y)
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 (L x W x H):	Approx. 20 cm x 12 cm x 3 cm

< 500 g

Standard Accessories: Sure-Probe™ Binaural Probe Microphone System with Lighted Visual Cues, Headphones and a Powered Set of Speakers, Probe Tubes, Insert Earphones or DD45 Headphone, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, External Power Supply, Auditec Sound File License, USB Cable, Software, Manuals & Carrying Case, Optional RECD Coupler

Weight:



AVANT StealthTechnical 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, Hughson Westlake Automated Audiometry
Options:	High Frequency Audiometry till 20.000 Hz
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.
Standard Accessories:	Insert Earphones, Bone Oscillator, Patient Response Switch, Talk Back Microphone, Operator Mic/ Monitor Headset, External Power Supply and Speaker Outputs
Optional Accessories:	TDH 39 or DD45 Headphones & HDA 300 (High Freq. Headphones)
Compatible with:	NOAH™, TIMS®, Blueprint OMS and Sycle.Net™
Power Requirements:	USB-powered or External Power DC 15 V/2A
Power Supply:	100V - 240V, 50/60 Hz
Dimensions:	Approx. 20 cm x 12 cm x 3 cm (L x w x H)
Weight:	< 1 kg
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: ANS 13.6-2010, Type 24.E (IEC 60645-182) Tone Audiometry, Speech Audiometry, Stenger Test, OutckSIN**, ABLB, SISI, Tone Decay, Hughson Westlake Automated Audiometry Two Channels: Two Channels: Insert Earphones or Headphones (D045). B81 Bone, Conductor, Free Field - Line Level Output Tone Stimull: Pure Tone, Warbie Tone, Continuous Or Pulsed. Warbie 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), Speech Weighted Noise, White Noise, Speech Audiometry, Speech Weighted Noise (Default), Speech Weighted Noise, White Noise, Speech Audiometry, Speech Weighted Noise (Default), Speech Weighted Noise, White Noise, Speech Audiometry, Speech Weighted Noise, White Noise, External Recorded (Opposite Channel) Air: 125Hz – 8000 Hz (limited 8000 Hz to 125500 Hz available) Bone: 250Hz – 8000Hz Acoustic Distortion: https://doi.org/10.1008/NPL-8000Hz https://		
Outputs: Insert Earphones or Headphones (DD45), B81 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 Tone Addiometry: Narrow Band Noise (Default), Speech Weighted Noise, White Noise, Speech Audiometry: Speech Weighted Noise, White Noise, Speech Audiometry: Speech Weighted Noise (Default), White Noise, External Recorded (Opposite Channel) Ariz 125Hz – 8000 Hz (limited 8000 Hz to 12500 Hz available) Bone: 250Hz – 8000Hz Sound Field: 125 Hz – 8000 Hz (Line Level) Acoustic Distortion: < 1.096 At 500 Hz, 100dB SPL Acoustic Distortion: < 1.096 At 500 Hz, 100dB SPL Attenuation: 1dB 0r 5dB Steps, User Selectable Minimum / Maximum Output: -10 dB To 120 dB HL At 1 KHz – Air (14 Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz – Bone (V4 Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz – Bone (V4 Inch Mono Jack) -10 dB To 75 dB HL At 1 KHz – Bone (V4 Inc	Standards:	
Tone Stimuli: Pure Tone, Warble Tone, Continuous Or Pulsed. Warble Modulation Frequency And Pulse Period Are User Adjustable Tone Audiometry: Narrow Band Noise (Default), Speech Weighted Noise, White Noise, Speech Audiometry: Speech Weighted Noise (Default), White Noise, External Recorded (Opposite Channel) Ar: 1251z – 8000 Hz (limited 8000 Hz tol 12500 Hz available) Bone: 250Hz – 8000Hz Sound Field: 125 Hz - 8000 Hz (limited 8000 Hz tol 12500 Hz available) Bone: 250Hz – 8000Hz Sound Field: 125 Hz - 8000 Hz (Lime Level) Acoustic Distortion: < 1.0% At 500 Hz, 100dB SPL Noise Floor: < -10dB HL From 125 Hz-8000 Hz Attenuation: 1dB 0r 5dB Steps, User Selectable -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 Jacks) -10 dB To 75 dB HL At 1 KHz – Bone (¼ Inch Mono Jacks) -10 dB To 75 dB HL At 1 KHz – Bone (½ Inch Mono Jacks) -10 dB To 75 dB HL At 1 KHz – Bone	Channels:	Two Channels
Masking Signals: Tone Audiometry: Narrow Band Noise (Default), Speech Weighted Noise, White Noise. Speech Audiometry: Narrow Band Noise (Default), White Noise, External Recorded (Opposite Channel) Air: 125Hz – 8000 Hz (Limited 8000 Hz to 12500 Hz available) Bone: 250Hz – 8000Hz Sound Field: 125 Hz – 8000 Hz (Limited 8000 Hz to 12500 Hz available) Bone: 250Hz – 8000Hz Acoustic Distortion: < 1.0% At 500 Hz, 100dB SPL Noise Floor: < 1-10dB HL From 125 Hz-8000 Hz Attenuation: 1dB 0r 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 Jacks), -10 dB To 75 dB HL At 1 KHz – Bone (¼ Inch Mono Jack) Free Field Output: (Using 50 Watt Stereo Amplifier With 89 dB Sensitivity Speakers) Speech Input: Microphone (3.5 mm Stereo Jacks) 1/O Jacks - 3.5 mm: Left Air Conduction (2), Right Air Conduction (2), Bone Conduction, Patient Talk Back Microphone, Free Field (Line Out) VO Jacks - 3.5 mm: 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. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Outputs:	Insert Earphones or Headphones (DD45). B81 Bone, Conductor, Free Field - Line Level Output
Audiometry: Speech Weighted Noise (Default), White Noise, External Recorded (Opposite Channel) Air: 125Hz – 8000 Hz (limited 8000 Hz to 12500 Hz available) Bone: 250Hz – 8000Hz Sound Field: 125 Hz - 8000 Hz (Line Level) Acoustic Distortion: < 1.0% At 500 Hz, 100dB SPL Attenuation: 1dB Or 5dB Steps, User Selectable Minimum / Maximum Output: -10 dB To 120 dB HL At 1 KHz – Air (1/4 Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz – Bone (1/4 Inch Mono Jack) Free Field Output: (Using 50 Watt Stereo Amplifier With 89 dB Sensitivity Speakers) Speech Input: Microphone (3.5 mm Stereo Jacks) 1/O Jacks - 3.5 mm: Operator Headphones (Output), Operator Talk Forward Microphone, Patient Talk Back Microphone, Free Field (Line Out) L/O Jacks - 3.5 mm: 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. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Ialkback Microphone, Auditec Sound File License, USB Cable,	Tone Stimuli:	
Acoustic Distortion: < 1.0% At 500 Hz, 100dB SPL Noise Floor: < -10dB HL From 125 Hz -8000 Hz Attenuation: IdB To 120 dB HL At 1 KHz - Air (14 Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz - Bone (14 Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz - 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 - 3.5 mm: Left Air Conduction (2), Right Air Conduction (2), Bone Conduction, Patient Response Switch Communication Port: USB Power +5 Volts DC, Less Than 500mA Dimensions: Approx. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Masking Signals:	
Noise Floor: < -10dB HL From 125 Hz-8000 Hz Attenuation: 1dB 0r 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 Jacks) 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 - 3.5 mm: Operator Headphones (Output), Operator Talk Forward Microphone, Patient Talk Back Microphone, Free Field (Line Out) I/O Jacks - 3.5 mm: 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. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Frequency Range USB Power Only:	
Attenuation: 1dB Or 5dB Steps, User Selectable -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: Free Field Output: Free Field Output: Microphone (3.5 mm Stereo Jacks) VO Jacks - 3.5 mm: 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. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Acoustic Distortion:	< 1.0% At 500 Hz, 100dB SPL
Minimum / Maximum Output: -10 dB To 120 dB HL At 1 KHz — Air (1/4 Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz — Bone (1/4 Inch Mono Jacks), -10 dB To 75 dB HL At 1 KHz — Bone (1/4 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) 1/0 Jacks - 3.5 mm: Operator Headphones (Output), Operator Talk Forward Microphone, Patient Talk Back Microphone, Free Field (Line Out) 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. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Noise Floor:	< -10dB HL From 125 Hz-8000 Hz
### Free Field Output: -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) Wolf of Watt Stereo Amplifier With 89 dB Sensitivity Speakers	Attenuation:	1dB Or 5dB Steps, User Selectable
Speech Input: Microphone (3.5 mm Stereo Jacks) I/O Jacks - 3.5 mm: Derator Headphones (Output), Operator Talk Forward Microphone, Patient Talk Back Microphone, Free Field (Line Out) I/O Jacks - 3.5 mm: 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. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Minimum / Maximum Output:	· · · · · · · · · · · · · · · · · · ·
1/O Jacks - 3.5mm: 1/O Jacks - 3.5 mm: 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. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Free Field Output:	
Free Field (Line Out)	Speech Input:	Microphone (3.5 mm Stereo Jacks)
Communication Port: USB (Provides All Device Power) USB Power +5 Volts DC, Less Than 500mA Dimensions: Approx. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	I/O Jacks - 3.5mm:	
Power Requirements: USB Power +5 Volts DC, Less Than 500mA Dimensions: Approx. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	I/O Jacks – 3.5 mm:	Left Air Conduction (2), Right Air Conduction (2), Bone Conduction, Patient Response Switch
Dimensions: Approx. 16 cm x 12 cm x 3 cm (L x W x H) Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Standard Accessories: Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Communication Port:	USB (Provides All Device Power)
Weight: < 500 g Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Standard Accessories: Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Power Requirements:	USB Power +5 Volts DC, Less Than 500mA
Insert Earphones or DD45 Headphones, Bone Conductor, Operator Mic / Monitor Standard Accessories: Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Dimensions:	Approx. 16 cm x 12 cm x 3 cm (L x W x H)
Standard Accessories: Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,	Weight:	< 500 g
	Standard Accessories:	Headset, Patient Response Switch, Talkback Microphone, Auditec Sound File License, USB Cable,



AVANT AIR+ Technical Specifications

Screening Audiometer as per ANSI S3.6-2010, IEC 60645-1:2012, Type 4; Standards: **Tone Audiometry Outputs:** DD65 Headphones Air: 125 Hz - 8 kHz Frequency Range: Max Output: Air Conduction: 100 dB HL For Mid-Range Frequencies, **Attenuation:** 1 dB Step Or 5 dB Step, User Selectable **Optional Accessories:** DD450 Headphones, DD45 Headphones & Insert Earphones NOAH™, TIMS®, Blueprint OMS and Sycle.Net™ Compatible with: **Power Requirements: USB-powered Dimensions:** Approx 12 cm x 12 cm x 3 c m (W x D x H) **Net Weight:** < 500 gDD65 Headphones, Patient Response Switch, Talkback Microphone, Operator Mic, Monitor **Standard Accessories:** Headset, Software & Manuals, Carrying Case



MedRx Tinnometer

Technical Specifications

Standards:	Screening Audiometer as per ANSI S3.6-2010, IEC 60645-1:2012, Type 4; Tone Audiometry, Tinnitus Assessment
Outputs:	DD450 Headphones
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™, TIMS®, Blueprint OMS and Sycle.Net™
Power Requirements:	USB-powered
Dimensions:	Approx 12 cm x 12 cm x 3 c m (W x D x H)
Net Weight:	< 500 g
Standard Accessories:	DD450, Patient Response Switch, Talkback Microphone, Operator Mic, Monitor Headset, Software & Manuals, Carrying Case



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 - 8000 Hz
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 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 16 cm x 12 cm x 3 cm (L x W x H)
Weight:	< 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 - 12.500 Hz
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 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 \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.
External Connections: Dimensions:	
	mm Stereo Jack (0.15 AC Volts RMS, Min. at 1 kHZ); Probe Microphone Permanently Connected.



Otowave Tymp Technical Specifications

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:	$+200daPa$ to $-400daPa\pm10daPa$
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:	Safety IEC 60601-1; EMC IEC 60601-1-2 Impedance IEC 60645-5 Type 2 Tympanometer ANSI 3.39 CE Mark Complies to EU Medical Device Directive
Power:	Battery 4 x Alkaline AA cells or 4 x NiMH (<=2.3Ah) rechargeable
Dimensions:	Approx. 21 cm x 8 cm x 4 cm (L x W x H)
Weight:	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:	Ipsilateral and contralateral or both User-selectable from: 500 Hz, 1 kHz, 2 kHz and 4 kHz (±2 %) Reflex levels: Ipsilateral: 70 dBHL to 110 dBHL (±3dB) Contralateral: 70 dBHL to 110 dBHL (±3dB)
Reflex Measurement Range:	0.01 ml to 0.5 ml \pm 0.01ml configurable in 0.01ml steps
Standards:	Safety IEC 60601-1; EMC IEC 60601-1-2 Impedance IEC 60645-5 Type 2 Tympanometer ANSI S3.39 CE Mark Complies to EU Medical Device Directive
Power:	Mains: 100-240 VAC; $50/60$ Hz via mains adapter (approved in medical safety standards); Batteries: $4 \times AA$ (either Alkaline or NiMH, the latter recharged external to the instrument)
Dimensions:	Base unit: 19 x 8.5 x 4 cm (excluding connections) Probe: 13 x 2.5 cm (max.) diameter
Weight:	Base unit: 330 g (without batteries, using mains power), 430 g (with batteries), Probe: 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 24 cm x 25 cm x 15 cm (W x D x H)
Net Weight:	< 4 kg
Enclosure:	Acoustically Dampened Enclosure, 15dB Minimum Attenuation
Environmental Requirements:	Working Temperature Range From 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°℃

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=0N)
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, 1/100000 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, Configurable through the control software), Default: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	$80\text{mA} \pm 20\text{mA}$
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: 2.5A @ 100-240V 32°T0 120°F • 0°T0 50°C **Operating Temperature:** Weight: Approx. <5 kg 26 cm x 31 cm x 16 cm Dimensions: (Approx.) **Debris Filter:** I-63S **Vacuum Tips:** #14, #15, 2-#18 and 2-#20 gauge w/Safety Lock attachment **Drying Chamber Cycle Time:** 4 minutes with auto shut-off **Vacuum Wand:** Constant Drying Chamber Cup & Filter, Vacuum Wand Filter with O-Ring, 6 Vacuum Wand Tips, **Standard Accessories:** Cleaning Tool Kit, Instruction Manual



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



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MedRx Minimum Computer Specs:

Windows® PC compatible computer, Intel™ i5 Dual Core, 2.0 GHz or better. 4 GB RAM. 20 GB free hard drive space. Available 2.0 USB port. Windows 7, 8 or 10 Professional (32 or 64-bit).