



Otoport will meet your needs whatever your clinical requirements, size or type of screening program. It's a compact, easy to operate handheld device featuring unrivalled adaptability.

The Otoport brings together over 35 years of expertise in one portable device. Otodynamics was the first OAE company and we pioneered methods that set the OAE gold standard. The reliability and performance of Otodynamics' AABR screening algorithm has been proven in universal newborn hearing screening programs around the world.

For screening, select the Otoport Lite model with the test combination you prefer. From infant screening with AABR, OAE, or AABR+OAE to Paediatric screening with OAEs. High specificity relies on good testing conditions and here the Otoport Lite scores by assessing the testing environment and providing essential feedback.

For investigations, the Otoport has powerful clinical analysis models with fully customisable OAE protocols. Each test is saved with the actual physiological response. Choose the Otoport Advance model for clinical research and access to selected research functions for IRB approved projects.



HIGHLY ADAPTABLE
Meeting your screening
& clinical needs



FULLY CUSTOMISABLE
Up to 16 protocols
available



ANY TEST COMBINATION
DP | TE | AABR | DP+AABR |
TE+AABR | DP+TE+AABR



VISUAL DISTRACTION DISPLAY
Friendly Paediatric animations



QR SCAN
For data entry & login

# CHOOSE YOUR OTOPORT MODEL

Every Otoport has the same hardware, ensuring reliability, uniform performance, and upgradability. Three distinct firmware versions provide levels of functionality tailored to three application areas.



# LITE Fast | Easy | Clear

The Otoport Lite has been expertly designed to be flexible, simple, easy-to-use, and fast, while meeting all your screening needs from newborn screening through to paediatric assessments. Screeners are aided to identify problems by on-screen messages, to improve their techniques, and thereby improve overall performance of the program. Choose any one or a combination of DPOAE, TEOAE and AABR tests Upgrade later with a QR license activation. Each test type delivers reliability and performance with ultra fast, accurate and clear results.



# **FLEXI** OAEs designed for the clinic

The Otoport Flexi has exactly what's needed for clinical OAEs at a highly competitive price. Six powerful customisable protocols, including 12 frequency 1-8kHz DPgram with normative range markers. Clinical OAEs have real clinical value with adults and older children, alerting you to the possibility of both conductive and cochlear losses. The Otoport Flexi includes all the Otoport Lite functions and beyond. With one touch, the Otoport Flexi can be configured for adult, paediatric or infant screening applications.



#### **ADVANCE** With extended OAE functions

Benefit from the full range and power of the Otoport Advance. Boasting 16 fully customisable protocols, the Otoport Advance model will perform in the most demanding of clinics. Incorporating all the functions of the Otoport Lite and Flexi models, the Advance has three additional investigational OAE functions. DP ZOOM explores DP-gram features at up to 100 points per octave resolution. Stimulus levels are configurable in 1dB steps. DP GROWTH provides multi stimulus level DPOAE measurements at any frequency 1-8kHz. MULTI TEST function linking up to 4 loop-able test protocols allowing you to build a sequence of different DP and/or TE tests.



## **FEATURES COMMON TO ALL MODELS**

Learn more about the large number of features that are included in every Otoport model.



# **QUICKLOOK GUIDE**

Review the quick look guide to compare. at a glance, each Otoport model and their related DPOAE, TEOAE and AABR specifications. See additional options for your Otoport



# FAST | EASY | CLEAR

# OAE AABR

The Otoport Lite comes pre-configured for screening efficiency and arrives ready to go. Whether you choose AABR or OAE as your primary screen, Otoport requires minimal training to achieve fast and clear results. To meet your special requirements, you can also customise test protocols and use OAE and AABR in combination.

With Otoport you get multiple days of use between battery charges. Its robust design, large onboard searchable patient database and detailed response capture, means Otoport can meet all your screening and program management needs.

#### **UNIQUE DISTRACTION DISPLAY**

When conducting challenging pediatric OAE assessments, the Otoport has 6 visual distraction animations that helps to keep the child quiet and engaged. The child is encouraged to remain quiet as they watch the onscreen cartoon gradually filling with colour. If noise is detected during the test, the colours quickly fade and return when the child settles creating positive reinforcement.

## STREAMLINED TESTING

<ul> <li>WOR</li> </ul>	K LIST 1/5
ID	FAMILY
2E3B7605	Doe
2E3B7610	Bloom
2E3B7628	Hall
2E3B7637	Lewis
2E3B7647	Martin
DET	TAIL TEST

Use the programmable Work List feature to plan your screening workload.

## **PAUSE CONTROL**



Pause and resume a test at any time to check probe fit, adjust the environment or to allow time to settle a patient.

# DP OAE



INFANT PAEDIATRIC

Tests 4 frequencies (2,3,4,6kHz) with a choice of 3 preset stimulus levels, optimised for screening. Rapidly test infants and preschool children.

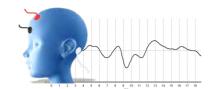
# TE OAE



INFANT

Tests up to 5 half octave frequency bands (1,1.5, 2, 3 and 4kHz) using our 'Quickscreen' click stimulation at 84dBSPLpe, proven in the worlds most extensive screening trials. TEOAEs are fast and effective for infant screening.

# AABR





Tests using short Chirp stimulation, configurable between 35 and 45dBnHL designed for newborn screening. Results are fast and with continuous monitoring of Fsp and ABR waveform shape to ensure that a 'clear response' is a true response.

# 1. QUICK INPUT



Effortlessly enter **patient** details via QR code scanning\*, worklist or enter manually.

## 2. EASY FIT



Otodynamics right angled probe can be used for both OAE & AABR testing. Its unique design makes it easy to achieve a good probe fit.

Ear cups can also be used with the Otoport.

However, using the probe inserted into the ear for AABR can reduce consumable costs. Otoport can perform single or dual probe testing.

## 3. SUPERIOR PRE-TEST ANALYSIS

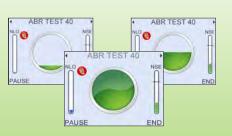




See test progress every step of the way, automated alerts are displayed if changes in stimulus levels, impedance, or excess noise that may effect the test.

For AABRs, superior pre-test environment checks provides separate powerline & infant noise indicators and quickly identify if a specific electrode has high impedance.

## 4. CLEAR TEST PROGRESSION



See test progress every step of the way, automated alerts are displayed if changes in stimulus levels, impedances, or excess noise levels that may effect the test.

For AABR there is continuous monitoring of Fsp and ABR waveform shape to ensure that a 'clear response' is a true response.

# 5. FAST ABR RESULT



The Otoport Lite is fast, easy and clear. With just 2 key presses\*\*, achieve a clear response.

OAE in as little as 7 seconds
AABR average pass in 80 seconds

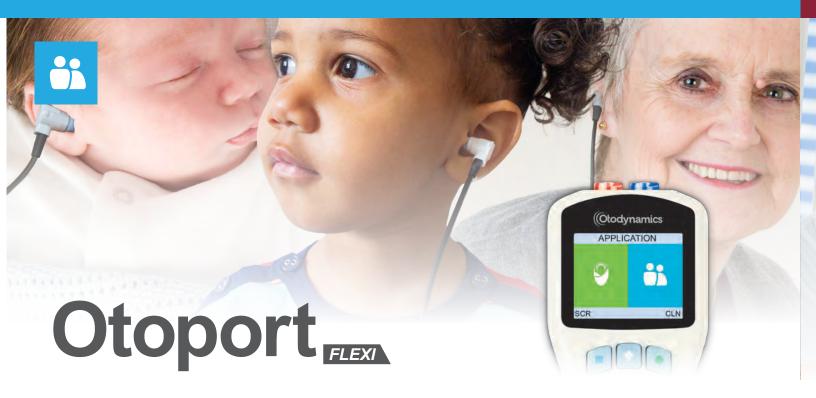
## 6. SMOOTH DOWNLOAD



Data transfer is quick and easy. Simply plug-in and tests can be automatically downloaded to Otolink PC software via wired or wirelessly

\* Hospital QR and barcoded IDs vary. The specification of your facilities QR/Barcode format is required to confirm compatibility.

\*\* Quick Start option enabled



# **OAES DESIGNED FOR THE CLINIC**

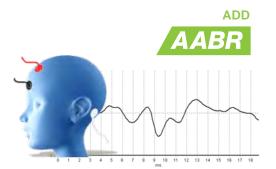
The Otoport Flexi model provides fast and accurate DPOAE recordings on adults, children, infants, and much more with extensive configurability and expandability.

At the heart of the Flexi is a 12 frequency 1-8kHz DPgram with ¼ octave resolution with 5 stimulus formats. Smart frequency sweep management optimises test time and settable normative range markers assist your interpretation of the results.

You can create customised DPOAE test protocols for special requirements. Use multiple levels to record cochlear function to high accuracy e.g. for the detection of changes with therapy or for monitoring cochlear status over time.

Every test stimulus is optimised using our unique 'in-the-ear calibration' process. Test details and responses are saved to the onboard patient records database, which you can search and review on the device. Or transfer results to PC, via USB or Bluetooth download, for more detailed examination with the included Otolink PC software.

The Otoport Flexi includes all the OAE functions of the Otoport Lite with increased protocols and customisation.



# **KEY FEATURES**



# DP 12 FREQUENCY/

Two customisable 1-8kHz DPgram protocols with ¼ octave resolution and 5 selectable stimulus formats. Smart frequency sweep management optimises test time and settable normative range markers assist interpretation



# DP OAE

Two 1-8kHz customisable protocols with Half octave line-graph and frequency circle display.



#### ADD

TE OAE

Increase the depth and power of your clinical investigations by adding our gold-standard 1-6kHz TEOAE analysis with half octave analysis between 800-6kHz and waveform display

You can add AABR infant screening to the Otoport Flexi model, offering two AABR protocols customisable between 35 - 45dBnHL. Extend to 60dBnHL for non-screening training/research use. Display the emerging ABR waveform test in real time and detailed examination post test.

# WITH EXTENDED OAE FUNCTIONS

Top of the Otoport range, the 'Advance' model is an exceptionally powerful handheld auditory investigation device.

Otoport ADVANCE

The Advance has all the features and options of the Otoport Flexi plus three additional investigational test modes: DP Zoom, DP Growth and MULTI-TEST. TEOAE is also included as standard with additional high-resolution spectral analysis from 0.5 to 6kHz.

Take advantage of all Advance's sophisticated tools to go beyond routine clinical DPOAE recordings towards clinical research investigations. Capture detailed test information including physiological responses for in-depth analysis in our Otolink PC software, which can also export data for research.

Otoport records high resolution DPOAEs from 0.5kHz to 8kHz. Sweep frequency automatically or under manual control to focus on difficult frequencies. Achieve unrivalled frequency resolution with DP Zoom. Explore cochlear function with input-output measurements using the Advance DP Growth test. Link up to 4 tests together in a repeatable test sequency using the MULTI-TEST macro programmer.

# **KEY FEATURES**

(Otodynamics



# DP ZOOM/

Allows you to investigate a specific range of frequencies from 0.5 to 8kHz in high resolution of up to 100 pts/oct. Explore details of DP-gram features such as notches to establish their true extent and depth. Export data for analysis and research.



# DP GROWTH

Select any frequency and see how DPOAE intensity grows with stimulus level. Stimuli are optimised by the 'scissor' formula. Plot either dB/dB or uPa/dB growth. Automatic regression analysis provides slope and DPOAE threshold data for sufficiently linear uPa growth results.



# MULTI TEST

Four fully customisable loop-able test protocols. Allows you to build a sequence of DP and/or TE tests at different levels. Collect vast amounts of data automatically.

You can add AABR infant screening to the Otoport Advance model, offering two AABR protocols customisable between 35 - 45dBnHL. Extend to 60dBnHL for non-screening training/research use. Display the emerging ABR waveform test in real time and detailed examination post test.





# **Otoport**

**COMMON FEATURES ACROSS ALL MODELS** 

## **SCREENING** STREAMLINED

WOR	V LIOI
ID	FAMILY
2E3B7605	Doe
2E3B7610	Bloom
2E3B7628	Hall
2E3B7637	Lewis
2E3B7647	Martin
DET	TAIL TEST

Use the programmable Work List feature to plan your screening workload.

## LARGE **STORAGE**



Store up to 2000\* tests listed in chronological order with on-screen test result summary table.

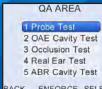
#### **PAUSE TESTING**



Pause and resume testing at any time to address any issue impacting a test, such as noise, probe or electrode fitment.

**INFORMATIVE** 

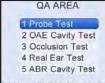
## QUALITY **ASSURANCE**



Dedicated QA test area with optional enforced daily QA . View QA history with on board Probe test facility and Probe ID tracking.

**NUMERICAL DISPLAY** 

# (Otodynamics **APPLICATION**



# **SCANNING**

UNIQUE DISTRACTION DISPLAY

positive reinforcement.

When conducting challenging pediatric OAE assessments, the

Otoport's has 6 visual distraction displays that help to keep the child quiet and compliant. The child is encouraged to remain quiet as they watch the onscreen cartoon gradually fill with color. If noise is detected during the test, the colors quickly

fade and return when the child settles, engaging the child by

Built in QR/Barcode reader. Effortlessly scan patient details for easy data input or to search existing patient records\*\*.

Scan user details for login access.

To upgrade Otoport or to tailor the test mode for specific applications, simply scan a different QR code license\*\*\*. With the Otoport you are not limited to one installation.



Easy push pull probe connection. Choice Single or dual probe testing

**Otodynamics** 



Transfer data to PC via Bluetooth® or wired connection.

Filter

Probe body

The XPD probe body benefits from the inclusion of an internal filter that fully protects the microphone and

loudspeaker ports.

#### **ACCURACY**



Every test starts with automated 'in-the-ear' calibration ensuring accurate results.

1	JSERS	1/5
USER	PASSWO	ORD
Admin	ADN	Ä
Doe	DOE	
Evans	EVA	
Hall	HAL	
Dean	DEA	
BACK	-	EDI

Create multiple user profile logins with password protection and Admin management control and security.

# **ADMIN CONTROL**



With automated monitoring of the testing environment. Helpful on-screen notification is provided advising of any issue impacting a test such as noise, probe or electrode fitment.

Numerical table of test data, Signal, noise and SNR.

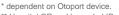
## **OTOLINK PC DATA MANAGEMENT SUITE**

Download test results wirelessly or via USB from the Otoport or when docked in the docking station. Test details can be quickly reviewed, printed and archived. Printing reports directly to a PDF file is available. Data can be exported, for example, to OZ, HiTrack, GDT, Noah\*\* or as CSV file. Patient Work Lists can be uploaded to the Otoport, assisting with managing workloads in busy environments. Otolink also provides access to firmware and application updates from Otodynamics via the internet. Compatible with Windows 10 and 11.









<sup>\*\*</sup> Hospital QR and barcoded IDs vary. The specification of your facilities QR/Barcode format is required to confirm compatibility

Otoport

# **PROBE & TIPS**

The Otodynamics XPD probe is designed to make daily maintenance and cleaning simple and quick. The new TIP HOLDER is fitted over the probe body and locates precisely with the sound ports when the TIP HOLDER tabs are clicked securely on the probe body.





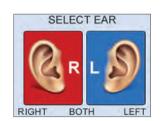
General - Tip holder

R-Type Tips

<sup>\*\*\*</sup> additional option

# ADDITIONAL OPTIONS

for your Otoport



**ADD BINAURAL TEST** 

Seamless testing both ears reduces patient disturbance.



**ADD MINI PRINTER** 

Wireless, compact, fast print time, numerical and band pass data. Battery powered.



ADD NOAH

To the Otolink PC Data

Management.



**ADD CARRY CASE** 

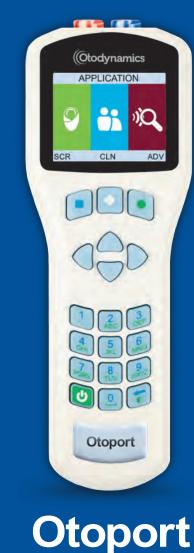
To store and transport the Otoport and all related items.



#### **ADD SCANNER**

Built in QR/Barcode reader. Effortlessly scan patient details for easy data input or to search existing patient records\*.

Scan user details for login access. To upgrade Otoport or to tailor the test mode for specific applications, simply scan a different QR code license\*\*. With the Otoport you are not limited to one installation.



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# WHAT'S INCLUDED

Otoport

INSTRUMENT WARRANTY

- OAE probe with cable clip
- Probe test cavity
  - USB download cable
  - Docking station
  - Sample ear tip pack
  - Sample infection control sleeve
  - Otolink PC software
  - Electrode Cable (with AABR option)









APPLICATION PACKS

NEWBORN SCREENING PAEDIATRIC SCREENING CLINICAL AUDIOLOGY RESEARCH

DP OAE

TE OAE

AABR

TEST CONFIGURABILITY	1 Protocol, 4 Parameters	2 Protocols, 11 Parameters	8 Protocols, 16 Parameters
PRESET FREQUENCIES	2, 3, 4, 6 kHz, 4 frequencies	Up to 8 kHz, 12 frequencies	Up to 8 kHz, 13 frequencies
FREQUENCY RANGE	2 to 6 kHz	1 to 8 kHz	0.75 to 8 kHz
FREQUENCY RESOLUTION	Half octave	Up to 4 pts/octave	Up to 100 pts/octave with DP Zoom
FREQUENCY RATIO	1.22	1.22	1.22
STIMULUS LEVELS L1/L2 (dBSPL)	60/55 or 65/50 or 65/55	60/50 to 70/70 (6 Presets)	60/50 to 70/70 (6 Presets) Custom 40 to 75 (Δ1dB)
DISPLAY	Graphic progress indicators / Numeric / Paediatric distraction / Line Graph	Graphic progress indicators / Numeric / Paediatric Distraction / Line Graph / Histogram	Graphic progress indicators / Numeric / Paediatric Distraction / Line Graph /Histogram
PASS CRITERIA	2, 3 or 4 frequencies	3 to 6 frequencies	1 to 6 frequencies
PASS SNR	6dB (Fixed)	6dB, configurable up to 14dB (Δ1dB) per freq.	6dB, configurable up to 14dB (Δ1dB) per freq.

ADDITIONAL FEATURES	Rapid DPOAE screening mode Easy-to-use pass/refer result Automatic test progression and interpretaion Large searchable database	Extensive configurability including 12 frenquency DPOAE Configurable norms Easy access to all Otoport LITE model features	DP Zoom to 100pts/octave DP Growth I/O with scissor mode Access to selected research function for IRB approved projects. Mutil test macro (4x protocols)

			Access to all Otoport FLEXI model features
	ADD TEOAE or TEOAE only	ADD TEOAE	TEOAE INCLUDED
TEST CONFIGURABILITY	1 Protocol, 4 Parameters	2 Protocols, 6 Parameters	2 Protocols, 8 Parameters
FREQUENCY RANGE	1, 1.5, 2, 3, 4 kHz	1, 1.5, 2, 3, 4, 6 kHz	1, 1.5, 2, 3, 4, 6 kHz
FREQUENCY RESOLUTION	Half octave bandwidth	Half octave bandwidth	Half octave bandwidth
STIMULUS LEVELS L1/L2 (dBSPLpe)	Fixed 84 dBSPLpe	60 to 90 dBSPLpe (Δ1dB)	60 to 90 dBSPLpe (Δ1dB)
DISPLAY	Graphic progress indicators Numeric / Paediatric Distraction / Histogram	Graphic progress indicators / Numeric / Paediatric Distraction / Histogram / TE Waveform	Graphic progress indicators / Numeric / Paediatric Distraction / Histogram / TE Waveform / high res TE spectrum / Stimulus Waveform & Spectrum
PASS CRITERIA	2, 3, or 4 half octave bands, or wide / narrow bands	1 to 5 half octave bands	1 to 5 half octave bands
PASS SNR	6dB (Fixed)	6dB, configurable up to 14dB (Δ1dB) per freq.	6dB, configurable up to 14dB (Δ1dB) per freq.
ADDITIONAL FEATURES	Gold standard TEOAE Quickscreen	Up to 6kHz with configurable norms.	Access to all Otoport FLEXI model features

	Automatic test progress and interpretation  Large searchable database  ADD AABR or AABR only	ADD AABR	ADD AABR
	Easy-to-use pass/refer result Automatic test progress and interpretaion	Choice of response window.  Easy access to all Otoport LITE model features	

OPTIONAL

	ADD AABR or AABR only	ADD AABR	ADD AABR
TEST CONFIGURABILITY	1 Protocol, 2 Parameters	2 Protocols, 2 Parameters	2 Protocols, 9 Parameters
STIMULUS LEVELS (dBnHL)	30 to 45 (Δ1dB)	30 to 45 (Δ1dB)**	30 to 45 (Δ1dB)**
STIMULUS TYPE	Chirp	Chirp	Chirp and Click
PASS CRITERIA	FSP with neonatal waveform template	FSP with neonatal waveform template	Configurable FSP with neonatal waveform template
ADDITIONAL FEATURES	Superior pretest environment, with power-line & individual impedance analysis. Fast pass/refer result Choice in stim delivery ear cup/insert Automatic test progress and interpretaion	Real time ABR waveform view  ** 60 dBnHL for training One key access to Otoport LITE features	Real time ABR waveform view  ** 60 dBnHL for training Extendable FSP for AABR waveform capture. One key access to Otoport FLEXI features.
ADDITIONAL OPTIONS			
Wireless Module	INCLUDED	INCLUDED	INCLUDED
Docking Station	INCLUDED	INCLUDED	INCLUDED
Integral Barcode/QR scanner	OPTIONAL	OPTIONAL	OPTIONAL
Wireless mini printer	OPTIONAL	OPTIONAL	OPTIONAL

OPTIONAL

NOAH

OPTIONAL

<sup>\*</sup> subject to advance information of facility's QR specification \*\* charges apply



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