



ERO•SCAN®
Webinar

1. Introduction of Presenters
2. Audiological Background of OAE
3. Product Introduction & Main Features
4. Data Management – What's New
5. Sales Configuration
6. Marketing Material



Please mute your microphone!

Remark: This webinar will be recorded

1. Introduction of Presenter



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- Manager Application and Audiological Services
- Area Sales Manager



2. Audiological Background of OAE

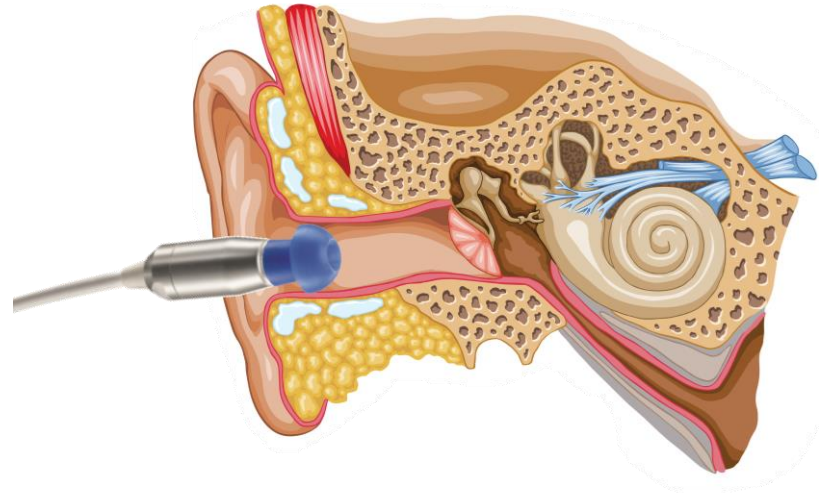
2. Audiological Background of OAE

What are Otoacoustic Emissions?

- Otoacoustic Emissions are soft sounds returned by the inner ear as a response to a sound event
- These returned sounds can be measured with highly sensitive microphones
- OAEs only occur in a normal functioning inner ear
- If there is damage to inner or middle ear, OAEs can not be measured

What is an Otoacoustic emissions (OAE) test?

- Objective evaluation of the inner ear function
- Quick measurement with easy to interpret PASS/REFER result



2. Audiological Background of OAE

Two types of evoked OAEs are relevant for hearing testing

Transient-evoked OAEs (TEOAEs)

- Evoked using a click stimulus with broad frequency range
- Represent the average activity in a range of the cochlea (frequency band)

Distortion product OAEs (DPOAEs)

- Evoked using a pair of primary tones
- Represent the activity at a specific point in the cochlea (frequency specific)
- DPOAE perform better in noisy environments

Newborn Hearing Screening:

- TEOAE and DPOAE can both be used for NHS
- Sensitivity and specificity are similar

A decorative graphic consisting of three small, colored shapes: a red slanted line, a blue square, and a green triangle, arranged in a triangular pattern.

3. Product Introduction & Main Features

3. Product Introduction

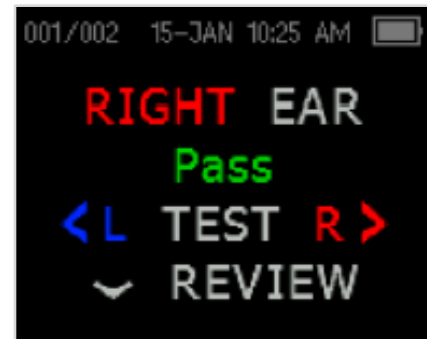
- Fast automatic OAE screening with Pass/Refer results
- Screening and diagnostic measurements with TEOAE and/or DPOAE
- Designed for testing patients of all ages
- Small, lightweight ear probe
- High noise immunity for operation in normal clinical environment
- Flexible data management solutions
- Wireless printing



3. Main Features – Fast automatic OAE screening

- Comprehensive PASS/REFER result
- PASS will be displayed in green and Refer in orange.
- Non-experts can understand test results easily

→ Very little training required



3. Main Features – Small and Lightweight

- Portable device allows testing at different locations
- Fits into pocket
- Device with probe weighs less than 250 g

→ Supports convenient and flexible workflow



250 g



3. Main Features – One Finger Operation

- 4 cursor buttons that can be operated with one hand
- Start screening with 2 button clicks

→ Screening can be performed in no time
→ Very little training required

Start screening



3. Main Features – Small, Lightweight and Robust Probe

- Easy handling and probe placement in ear canal
- Probe remains in the ear without holding, avoids noise that interferes with the test

→ **Reliable results and confidence**
in the handling of the device



3. Main Features – Fast Bootup

- Bootup takes less than 3 seconds, screening can be started right away by selecting the test ear
- Time saving and easy operation

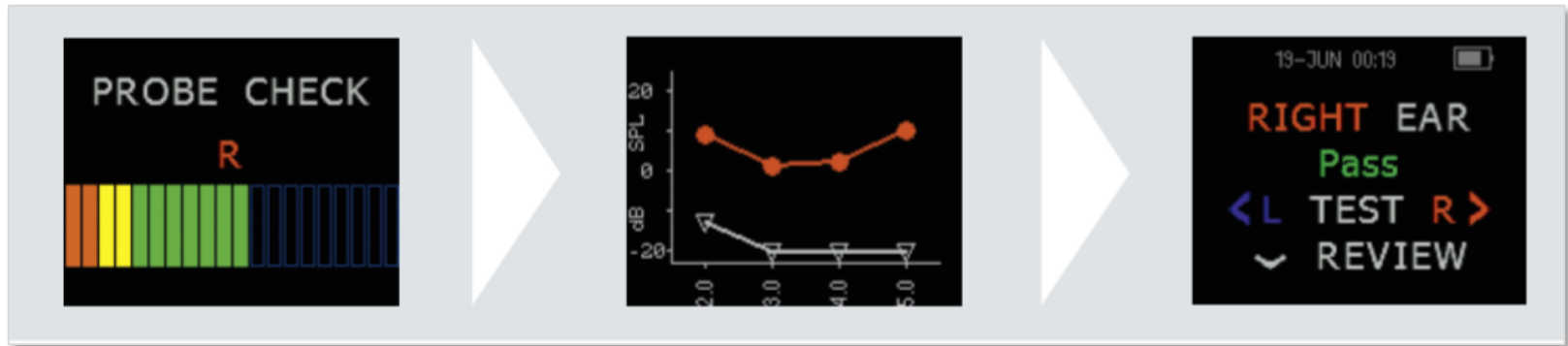
→ More time to focus on the patient



3. Main Features – Automatic Probe Fit Check

- Before an actual OAE measurement is started, the **ERO•SCAN®** performs a probe fit check
- Test conditions are evaluated
- Only if test conditions are good, the test starts automatically

→ Guarantee of reliable test results



3. Main Features – Feedback LEDs

- Operator is always informed about the test progress and status
- Charging status is indicated

→ Supports the operator in
gaining reliable test results



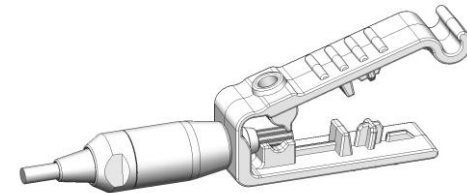
3. Main Features – Disposable Probe Tubes

- Disposable probe tube is replaced after every test and gets never blocked
- Dedicated probe tube removal tool to prevent damages of the probe

→ Saves the time needed to clean the probe tip

→ Avoids cross infection

→ More time to focus on the patient and documentation



3. Main Features – Wide Range of Sanibel Eartips

- Different sizes and shapes from preemie, flanged, up to 15 mm mushroom
- Eartip box with compartments
- Convenient eartip removal tool

→ Ready to test patients of all ages



3. Main Features – Wireless Printing

- Battery powered and ready to go
- Results can be printed immediately by a wireless thermal printer

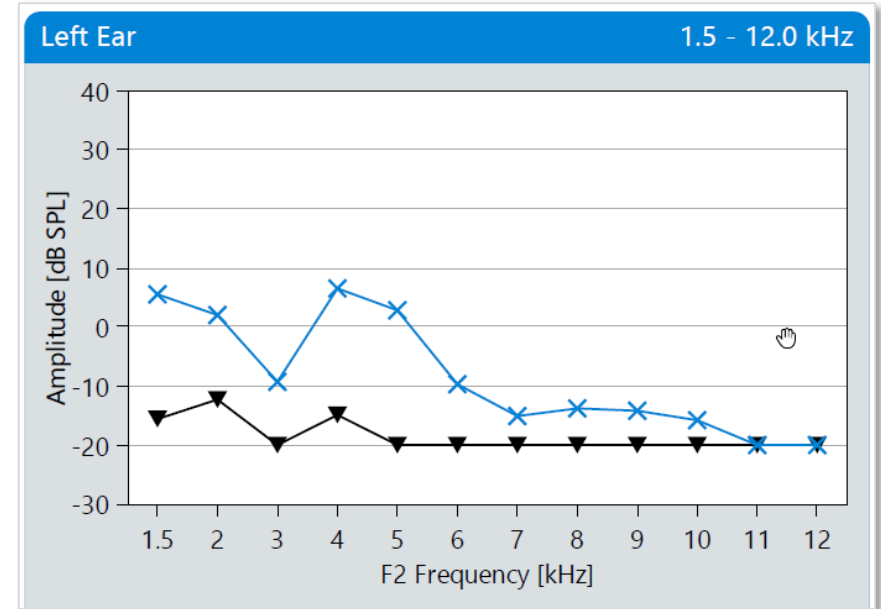
→ **Support of convenient and fast documentation**



3. Main Features – High Frequency Measurement

- High frequency DPOAEs up to 12 kHz
- Auditory Monitoring
 - of ototoxic medication
 - noise-induced hearing loss

→ Wide range of applications



A decorative graphic consisting of three small, colored shapes: a red slanted line, a blue square, and a green triangle, arranged in a small cluster.

4. Data Management - what's New

4. New Firmware Features (Version 113.05)



Storage Capacity

Now: 500 patients
Before: 250



Setting for Reverse Frequency Measurement

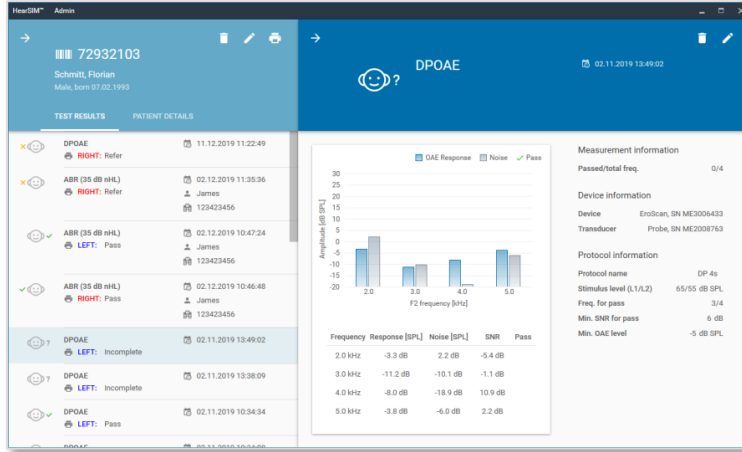
From high frequencies to low
frequencies
or
From low frequencies to high
frequencies



Setting for Auto-Stop

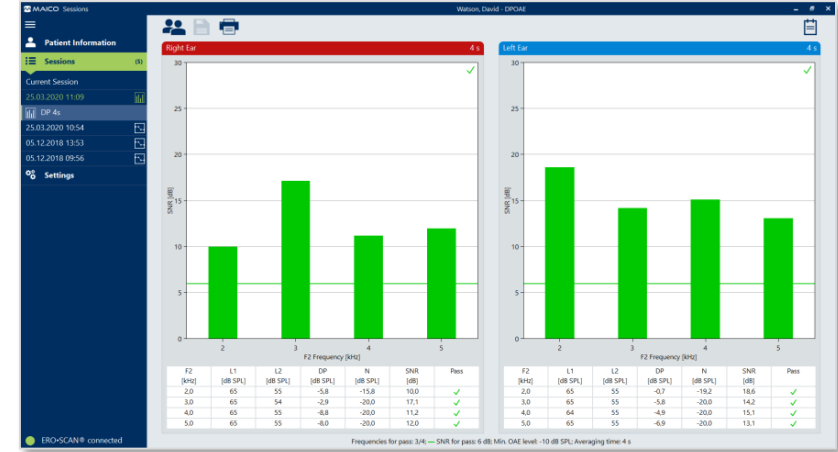
Stop measurement early when
PASS criterion was met

4. Optional Software Solutions



HearSIM™

- Dedicated for newborn hearing screening
- Manage patients and test results
- Tracking data export



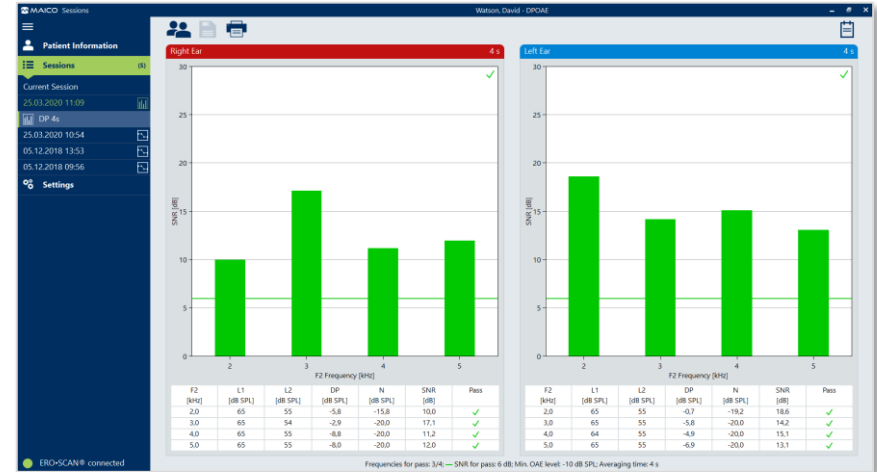
Sessions

- Manage also diagnostic results
- Supports of many other MAICO devices, like touchTym, MA 25e, MA 27e and MA 28
- Flexible database and EMR integration

→ You can add the software solution for your personal needs

4. Sessions (optional)

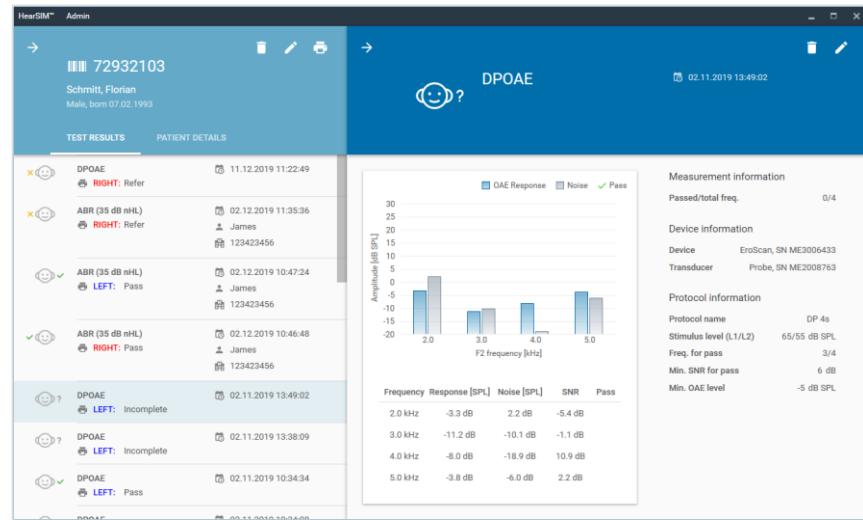
- Standalone, with OtoAccess® Database or NOAH
- EMR integration interface (XML and GDT)
- Combined support of audiometry, tympanometry and OAE devices
- All OAE diagnostic and screening results supported
- With OtoAccess Database:
 - Patient/result up- and download from PC to ERO•SCAN®
 - Optional: Worklist HL7 integration



4. HearSIM™ (optional)

- Management of patients and tests
- Review and print test results
- Transfer patients to the device
- Perform tracking data export
- Suitable for full featured screening programs

Please note: Only compatible with
the **ERO•SCAN® Screening** versions



4. Compatibility

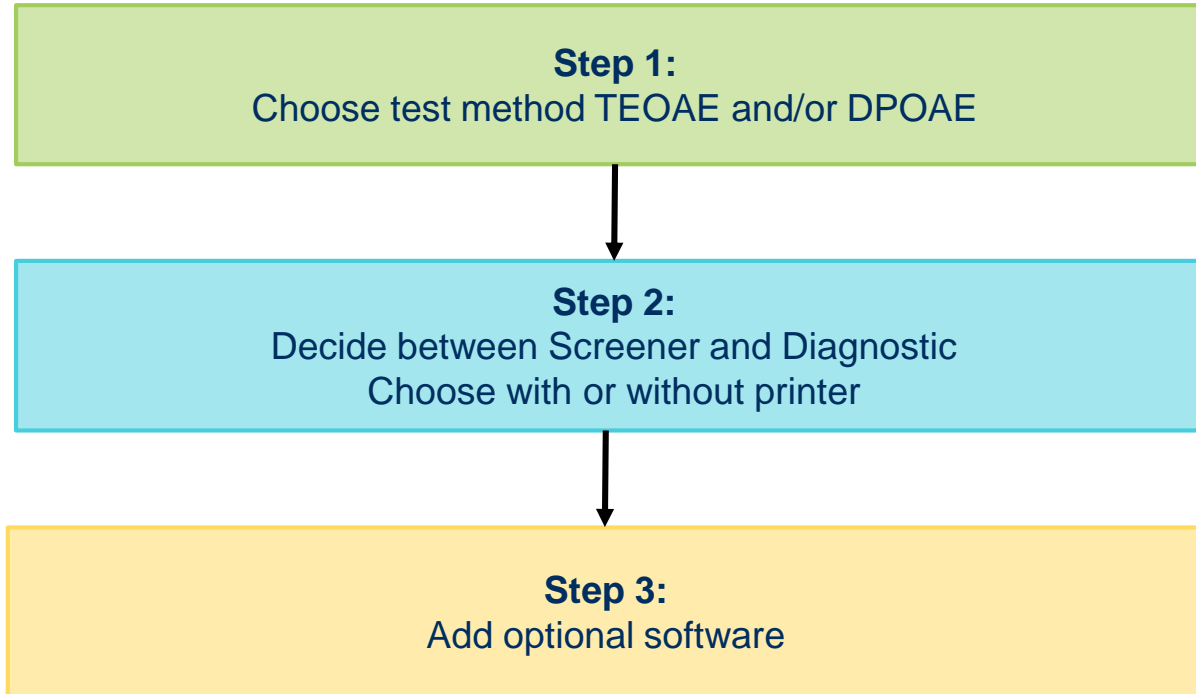
Type	Application	Protocol	HearSIM	Sessions
TEOAE	Screening	TE 64s	✓	✓
		TE 32s	✓	✓
	Diagnostic	TE 1.5-4.0		✓
		TE 0.7-4.0		✓
DPOAE	Screening	DP 4s	✓	✓
		DP 2s	✓	✓
	Diagnostic	DP 2.0-5.0		✓
		DP 1.5-6.0		✓
		DP 1.6-8.0		✓
		DP 1.5-12		✓



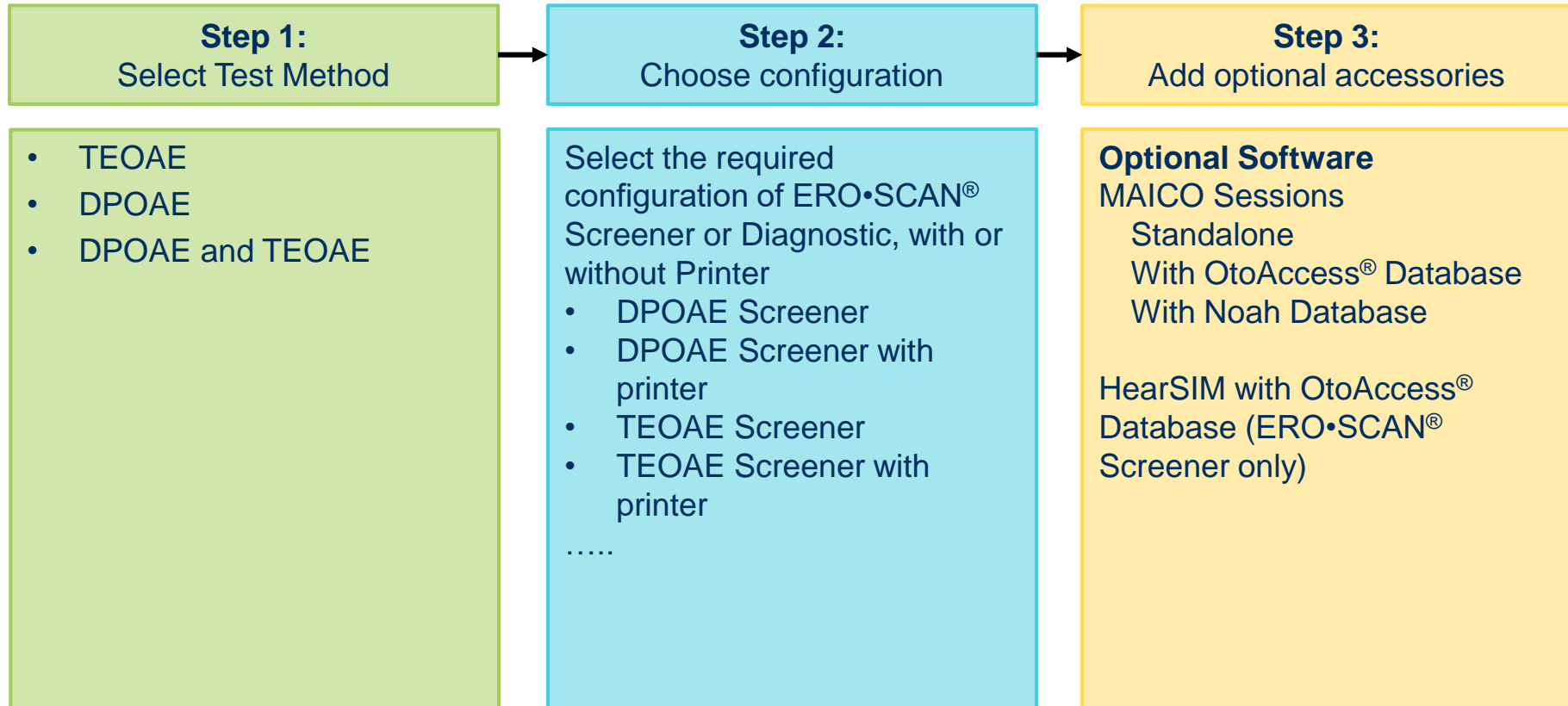
Questions?



5. Sales Configuration



5. Sales Configuration - Overview



5. Components and Accessories

Standard Components



ERO•SCAN® device



Probe



Eartip set



Carrying case

Standard Components



Printer





Questions?



6. Marketing Material

6. Marketing Material



People & Product Pictures

6. Marketing Material


SPECIFICATIONS

ERO-SCAN
For OAE screening and diagnostic testing

Frequency specific OAE Evaluation
The ERO-SCAN for frequency specific TEOAE and / or DPOAE comes with a real plus: The sharp organic LED display allows direct evaluation via SNR and value graph, thus making the handling even more comfortable. Appropriate to your needs, you can choose between the ERO-SCAN with screening or diagnostic functions.

ERO-SCAN with Screening Function
The ERO-SCAN with screening functions comes with automated evaluation and is the ideal solution for screening newborns, infants, pre school and nursery children.

ERO-SCAN with Diagnostic Function
The ERO-SCAN with diagnostic functions offers advanced applications – suitable for pediatricians, occupational health services and audiologists. Customizable protocol parameters and an extended frequency range makes it ideal for preschool screening and testing people of all ages.



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Test Specifications

Measurement Type
DPOAE (Distortion Product Otoacoustic Emissions)
TEOAE (Transient Evoked Otoacoustic Emissions)

Frequency Range
Screening Version
DPOAE: 2.0 kHz to 5.0 kHz
TEOAE: 1.0 kHz to 4.0 kHz
Diagnostic Version
DPOAE: 1.0 kHz to 12.0 kHz
TEOAE: 0.7 kHz to 4.0 kHz
Stimulus Intensity Range
DPOAE: 40 dB SPL to 75 dB SPL
TEOAE: 80 dB SPL peak equivalent (L4 dB)

Monitor Probe: Specifications
Microphone System Noise -30 dB SPL at 2 kHz (1 Hz bandwidth)
-10 dB SPL at 1 kHz (1 Hz bandwidth)
Cable Length 1.7 m
Weight 28 g

Standards
IEC 60645-4:2009 Type 2, IEC 60811-1 Type B, IEC 60811-1-2, according to the class Ia of the IEC Medical Directive 93/42/EEC, (EN 15883-5:2008)

Standard Components
ERO-SCAN device with rechargeable battery and probe, Earplug (100 pcs), Earplug removal tool, Replacement probe tubes, Carrying case, PC Software (not included, Please request)

Symbol
We highly recommend to use Symbol disposables in order to guarantee optimal test results.



Specifications are subject to change without notice.

ERO-SCAN® 09-19

Datasheet

MAICO



ERO•SCAN
Otoacoustic Emission Testing

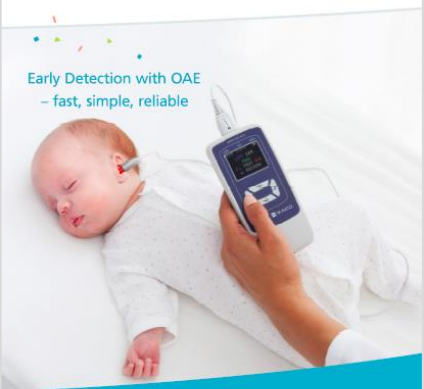


Brochure


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MAICO

Early Detection with OAE
– fast, simple, reliable



ERO•SCAN™
Trusted technology, new design



Poster A1 Format

6. Marketing Material



Roll-up



PowerPoint Presentation Template 16:9



E-Mail Footer

6. Marketing Material



Graphics for Congresses/ Exhibitions

6. Marketing Material

MAICO EXTRANET for all downloads:
<https://extranet.maico-diagnostics.com/>

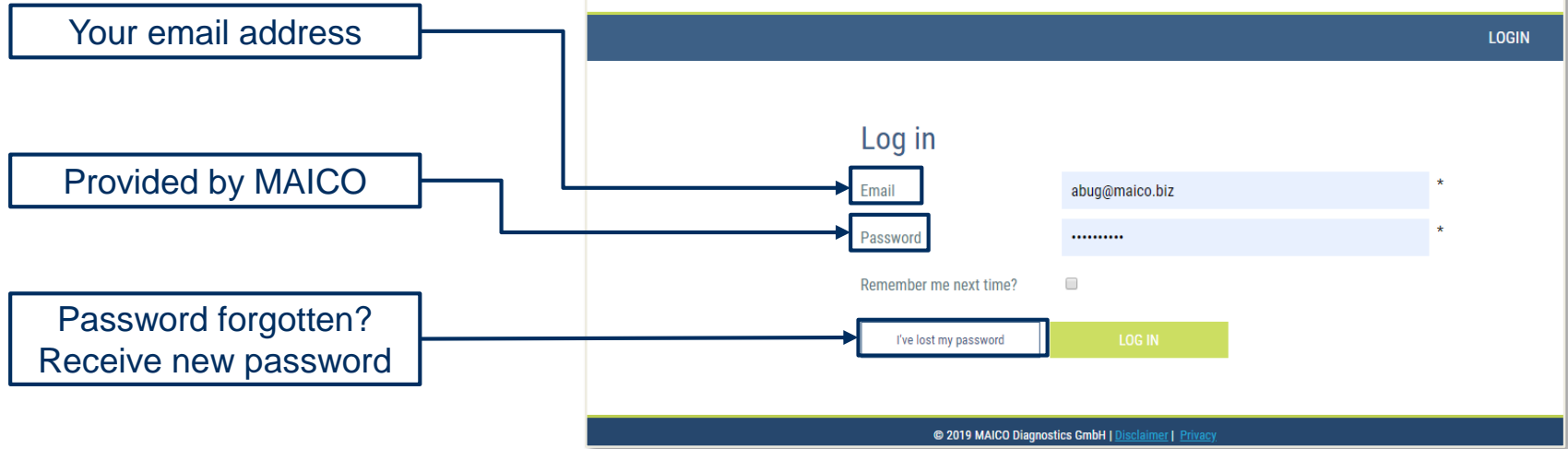


Diagram illustrating the login process for MAICO EXTRANET:

- Your email address → Email input field
- Provided by MAICO → Password input field
- Password forgotten? Receive new password → I've lost my password button

The login form includes the following elements:

- MAICO Website | Hotline: +49 30 7071 4650 | Search...
- MAICO EXTRANET | Welcome to MAICO International
- LOGIN button
- Log in section with Email and Password input fields.
- Remember me next time? checkbox
- I've lost my password button
- LOG IN button
- Footer: © 2019 MAICO Diagnostics GmbH | [Disclaimer](#) | [Privacy](#)



NEW Extranet will be online soon! We will keep you updated via email!



Questions?



MAICO

Hands on