

Science **made** smarter

# VisualEyes™ 515/525

VNG testing made  
futureproof

Beyond  
VNG  
testing

Complete  
solution  
for balance  
assessment



**Micromedical**  
by Interaoustics

  
**Interaoustics**

Audiometry

Tympanometry

ABR

OAE

Hearing Aid Fitting

**Balance**  


# Balance testing with VisualEyes™ 515/525



**Videonystagmography is the optimal tool for the observation, measurement and analysis of eye movements. It saves time, reduces costs and avoids the problems of myogenic and electrical noise.**

Interacoustics offers two VNG solutions, each with increasing scope:

- VisualEyes™ 515 is the standard VNG platform with standard protocols for Spontaneous Nystagmus, Bithermal Caloric, Positional and Dix-Hallpike testing.

- VisualEyes™ 525 offers the same test protocols as VisualEyes™ 515 and additionally expands into oculomotor tests with standard protocols for Gaze, Saccade, Saccadometry, Ocular Counter Roll, Smooth Pursuit and Optokinetic testing.

VisualEyes™ 515 and 525 can be integrated with the Orion rotary chair (compatible with Micromedical) to provide even greater flexibility in vestibular assessments. A comprehensive rotary chair test

battery with customizable protocols is available, including Sinusoidal Harmonic Acceleration (SHA), Step Test, VOR Suppression and Visual VOR. The reclining chair acts as an exam table for Calorics, Positionals, and Dix-Hallpike tests. Conveniently perform oculomotor tests from the chair when placed in a locked upright position.

### Secondary monitor display

- Optimal for full-field visual stimuli
- Eyes displayed on monitor during non-oculomotor tests
- Exceptional view of the patient's eyes from anywhere in the room

### Modern touch-enabled user interface

- Software is completely designed with touch capability in mind
- User can move seamlessly through a test battery without ever touching the mouse
- Shortest time from test to conclusion
- Intuitive design



Calibration Start

Next



#### Remote start/stop options

- Hand-held remote
- Goggle button
- Foot pedal

#### Room camera including video interview

- Record the patient's comments and case history
- Capture positional maneuvers with sound
- Patient interview before and after testing

#### Superior video playback

- Playback in slow motion or frame by frame
- Crosshairs displayed during playback
- Timeline scrolls to show location in raw data tracing synchronized with video
- Videos are stored in an easily accessible folder on the main screen

## ||

### User-friendly features

- Large eye display
- Remote operation
- Voice and audio cues
- Seamless video playback
- Report templates

#### Voice timer with audio cues

- Choose voice, beep, or both
- Option to count down or count up
- Cues for positioning the patient

#### Report and findings templates

- Use default reports or create unlimited customizable report templates
- Seamlessly drop OtoAccess® patient demographics fields into reports
- Default findings for easy report writing
- Create custom findings for advanced report writing

#### The goggle

VisualEyes™ 515/525 incorporates the industry's leading goggle designs. The USB cameras connect directly to a laptop or a desktop computer. Infrared illumination and high resolution cameras with focus adjustment allow for superior image quality.

- Side-mount goggles with monocular or binocular configurations and disposable foam cushions providing a sanitary solution for the side mounted camera models
- Top-mount binocular goggles with convenient side remote button to start video recordings
- Front-mount monocular small-face goggles



# VisualEyes™

## 515

### Vestibular analysis

The VisualEyes™ 515 is designed for smart software aided analysis of positional and caloric tests.

Rapid data transfer technology enables high quality video and precise measurements with all results stored in the OtoAccess® database.

The system also includes functions for creating and printing report templates and sharing data.

#### Connect and go

VisualEyes™ 515 is a completely portable VNG system. There is no bulky equipment to get in the way. Start the software, place the goggles on the patient and you are ready to test.

#### High quality video and analysis

The VisualEyes™ 515 performs real-time analysis. Rapid data transfer allows much more data to be analyzed, giving very precise measurements and outstanding video quality.

#### Integrated room video and sound

Record both the patient's activity as well as the eye movements. Record and save initial and existing patient interviews.

#### Remote controlled testing

It is possible to step through the tests using the USB connected foot pedal, hand-held remote or goggle button.

#### Video recording

The video from each test can be recorded and stored in full on the associated storage device (typically a hard drive) where it is linked to the results in the database record. The only limit to the size of the recording is the storage capacity of the recording device.

When the session is reviewed, the recording will be available for replay in normal, fast or slow mode. There is also the option to review the recording one frame at a time.

The recording can be exported in AVI format for consultation or teaching purposes. Various sound file formats are available to include sound recording together with the video.

#### Additional features

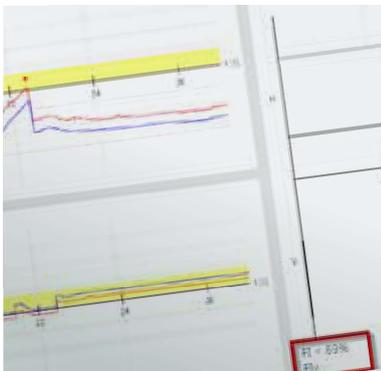
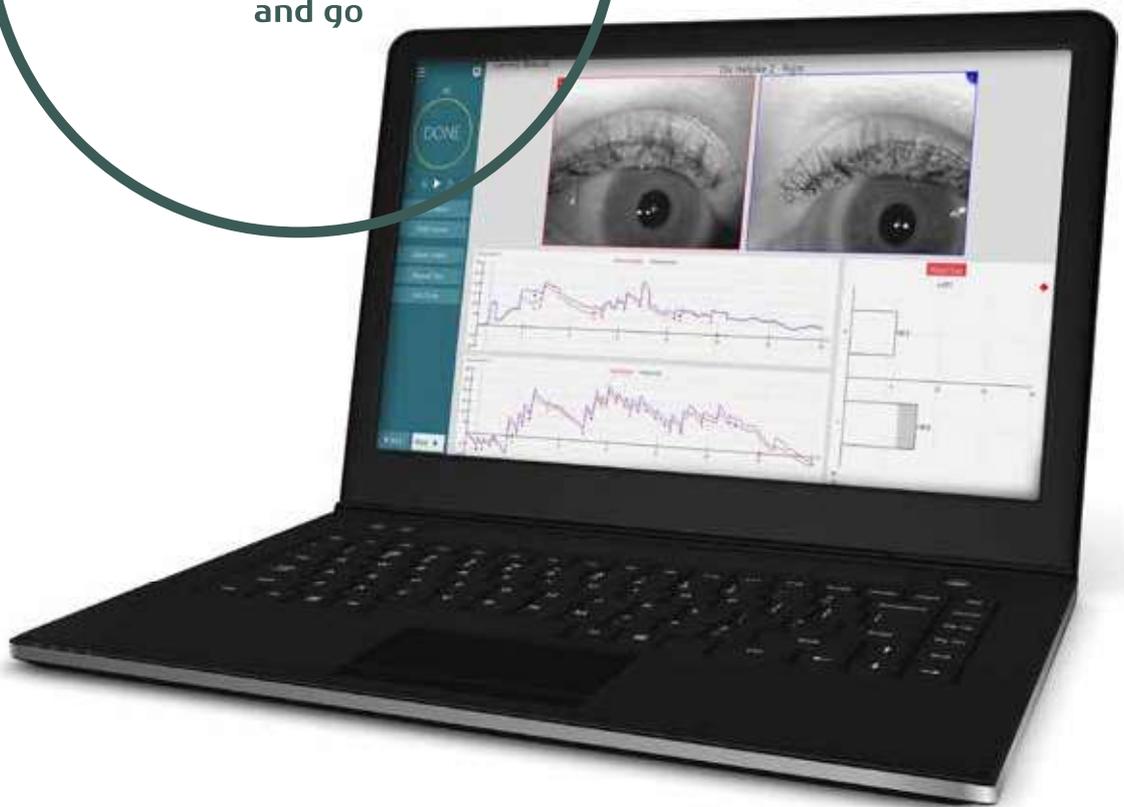
- Cutting edge eye trackers adjust for make-up and dilated pupils
- Reader station enables shared access to patient reports from multiple work stations
- Monothermal warm or monothermal cold caloric screening tests - available after the completion of two irrigations
- **Torsional eye movement observation with full screen eye images**
- **Nystagmus edit functions**
- Spontaneous Nystagmus Test with fixation index calculation
- Compact & convenient hardware
- Integration with Air Fx and Aqua Stim caloric irrigators
- Tester notes recorded with results
- Short automated calibration
- User-definable protocols
- **Real-time data analysis**
- High quality printouts of all analyses and selected raw data
- Multiple languages
- Customizable findings and report templates
- USB cameras with a variety of goggles options



#### Related products

- Eclipse with Vestibular EP
- Air Fx Caloric Irrigator
- Aqua Stim Caloric Irrigator
- Rotary Chair

**VisualEyes™ 515.**  
 Touch activated software  
 Automated calibration  
 Automatic fixation light  
 for caloric testing  
 Portable - connect  
 and go



Spontaneous Nystagmus test with fixation index



Nystagmus edit slope



Nystagmus bar graph



# VisualEyes™ 525

## Vestibular & Oculomotor analysis

**The VisualEyes™ 525 is designed for clinics that carry out detailed balance evaluations. It contains all the features of the VisualEyes™ 515 plus computer aided analysis of oculomotor tests.**

**Rapid data transfer technology enables high quality video and precise measurements, with all results stored in the OtoAccess® database. The system also includes functions for printing reports and sharing data.**

**Complete balance testing**  
Tests include automated calibration, Spontaneous Nystagmus, Gaze, Tracking, Saccade, Saccadometry, Ocular Counter Roll, Optokinetics, Positional, Hallpike and Bithermal/Monothermal Caloric. Easily design your own test protocols, which can be loaded with a single touch click.

### **Software-generated ocular stimuli**

Full field of view visual stimuli are software generated from your laptop or PC connected to a video projector or an LCD screen. The digital stimuli are ideal for both pediatric and adult populations and include several default patterns, e.g. stripes, chessboards and cartoons for pediatric applications.

### **Automatic or manual analysis**

The system produces highly accurate test results, but you can switch to manual edit mode in all tests to overrule the automatic analysis. In manual edit mode, you can add or delete nystagmus marks, change slopes and define alternative areas of analysis.

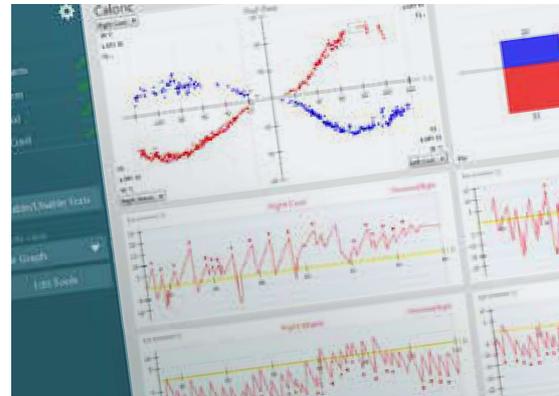
### **Remote controlled testing**

It is possible to step through the tests using the USB connected foot pedal, hand-held remote or goggle button\*.

### **Customizable protocols**

In addition to the standard default protocols, you can design your own protocols. You can create your own saccade patterns utilizing our custom sequence option.

**VisualEyes™ 525.**  
**Touch enabled software**  
**Fast eye-tracking &**  
**real-time analysis**  
**Full field of view**  
**visual stimuli**



Caloric summary pod view

**Video recording**

The video from each test can be recorded and stored in full on the associated storage device (typically a hard drive) where it is linked to the results in the database record. The only limit to the size of the recording is the storage capacity of the recording device.

When the session is reviewed, the recording will be available for replay in normal, fast or slow mode. There is also the option to review the recording one frame at a time. The recording can be exported in AVI format for consultation or teaching purposes. Various sound file formats are available to include sound recording together with the video.

**Sharing results**

The VisualEyes™ 525 is designed to facilitate collaboration. All results are stored in the OtoAccess® database with abilities for printing detailed color reports. Results and recordings can also be exported to pdf for electronic charting purposes.

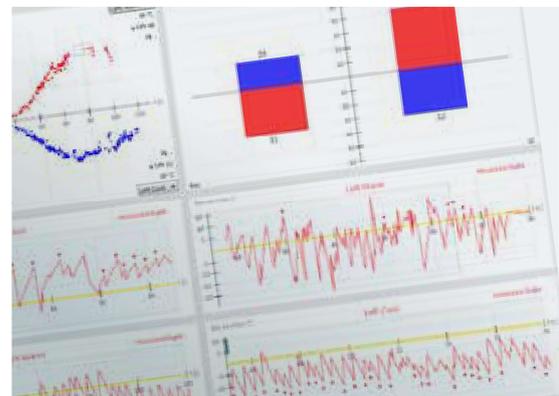
**Other features**

- Cutting edge eye trackers adjust for make-up and dilated pupils
- Reader station enables shared access to patient reports from multiple work stations

- Monothermal warm or monothermal cold caloric screening tests - available after the completion of two irrigations
- Torsional eye movement observation with full screen eye images
- Sleek portable design
- Fully randomized combined vertical and horizontal saccade protocol
- Detailed oculomotor testing
- Customizable protocols
- Monocular or binocular
- ANSI standard compliant
- Real-time analysis
- Synchronized video playback
- Full color printed reports for each test including a summary page
- Multiple languages
- Customizable findings and report templates
- USB cameras with a variety of goggles options

**Related products**

- Eclipse with Vestibular EP
- Air Fx Caloric Irrigator
- Aqua Stim Caloric Irrigator
- EyeSeeCam Video Head Impulse Test (vHIT)
- Rotary Chair



Caloric summary bar graph



# Science made smarter

## Interacoustics is more than state-of-the-art solutions

Our mission is clear. We want to lead the way in audiology and balance by translating complexity into clarity:

- Challenges made into clear solutions
- Knowledge made practical
- Invisible medical conditions made tangible and treatable

Our advanced technology and sophisticated solutions ease the lives of healthcare professionals.

We will continue to set the standard for an entire industry. Not for the sake of science. But for the sake of enabling professionals to provide excellent treatment for their millions of patients across the globe.

[Interacoustics.com](http://Interacoustics.com)

## Interacoustics A/S

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(training material)

Go online to  
explore our  
full product  
range

## Related products



**EyeSeeCam vHIT**  
Video Head Impulse Test



**Orion**  
Rotary Chair for balance  
assessment



**Air Fx & Aqua Stim**  
Versatile caloric air and  
water irrigators

## Product specifications

All technical and hardware specifications concerning all products can be downloaded from our website.



  
**Interacoustics**

Audiometry

Tympanometry

ABR

OAE

Hearing Aid Fitting

**Balance**  
