

Choose your next step to helping more vestibular patients



ICS® Impulse

  
otometrics  
a division of natus

# Create the solution that works best for you

**ICS® Impulse is a customizable solution. Choose between Video Frenzel, Video Head Impulse with SHIMP and age based normative data, Positional and Oculomotor – or choose all four. You decide how ICS Impulse works best for your facility.**



## **Superior pupil detection and fast, simple calibration**

Superior pupil detection provides error free data. Calibration can be performed anywhere using the ICS Impulse goggles with built-in lasers, allowing you to assess even more patients. All you need is a small surface from which to project the laser dots, and within seconds you will be ready to test.

## **Improved workflow**

All features of ICS Impulse have been designed to work with your preferred workflow. The innovative Vision Denied Solution enables you to suppress fixation and collect data with vision denied. The external monitor gives you better viewing of the patient's response, especially during positional testing and repositioning maneuvers. The use of a presentation remote means you stay close to your patient during data collection.

## **Customizable Workflow**

Configure and perform an automatic protocol which takes the guesswork out of patient assessment and increases efficiency. An automatic protocol performs the tests in the order you choose and eliminates the need for manual test setup.

## **Extensive reporting and data sharing**

Otometrics designed the ICS Impulse with a customized report function with vector-based graphics to meet documentation requirements. Third-party data-sharing interfaces directly with third-party EMR systems, and ASCII and raw data export are also available.

## **Superior playback**

The data can be played back in normal speed or slow motion. Playback the entire data collection or start from where the cursor is set. Playback allows you to review all components of the data collection.



**3-5  
YEARS**  
THE TYPICAL TIME  
IT TAKES A PATIENT  
WITH VESTIBULAR  
DISORDERS TO BE  
**DIAGNOSED**

Source: Vestibular Disorders Association

# ICS® Impulse:

## The result of decades of research

### 1 High-speed USB camera

The superior camera provides the best available technology for measuring eye movements. The camera provides the ability to record the eye and identify catch-up saccades (overt and covert), nystagmus and skew deviation.

### 2 Superior sensor

The nine axis motion sensor accurately measures the head movement allowing for direct comparison of head and eye movement. The sensor allows for Head Position Feedback. Head Position Feedback precisely tracks head motion in free space. The superior stability and response time provides

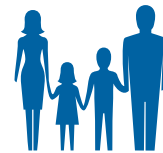
instant feedback for correct head positioning during vHIT and positional testing.

### 3 Light weight

Weighing 60 grams, the goggle ensures no slippage and therefore provides quality data collection without missing any important eye movements. The lightweight design also makes the testing more comfortable for the patient.

### 4 Built-in calibration lasers

Without additional hardware, the lasers provide stimulus for calibration and oculomotor testing.



ICS Impulse makes it possible to test children and bed-ridden patients.

## Greater precision... ..faster diagnosis



### Video Frenzel

At the core of ICS Impulse is the powerful Video Frenzel, giving you easy and affordable access to vestibular assessment and treatment.



### Positional

Increase accuracy in assessing and treating patients with BPPV. Head Position Feedback, Head Velocity, 3D Nystagmus Assessment\* and real time SPV make it possible.



### vHIT and SHIMP

The only test that can assess all six semicircular canals and approved by Drs Halmagyi and Curthoys. ICS Impulse vHIT & SHIMP enables head impulse testing with gold-standard accuracy.



### Oculomotor

A new revolutionary approach to oculomotor testing, Oculomotor provides simple and quick tests that assist in determining if the disorder is central or peripheral.\*



## Start helping more vestibular patients today



Visit [ICSImpulse.com](http://ICSImpulse.com) for more product information, training and webinars.

*\*Optional Torsional Analysis Available*

# ICS® Impulse: Bringing diagnostic accuracy and efficiency into balance testing



**2008 ▼**

## **More than 20 years of research and development**

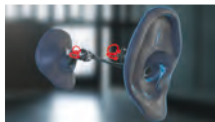
A visit to Sydney, Australia creates excitement and spawns a collaboration for Otometrics. The lateral video head impulse test is proven to have comparable results to scleral search coils.



**2011 ▼**

## **Gold standard vestibular testing in the clinic**

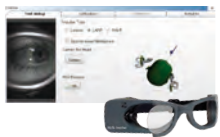
ICS Impulse is launched proving reliable lateral vHIT data is possible and introducing the new gold standard.



**2012 ▼**

## **Assess all six semicircular canals**

ICS Impulse is further developed to include the anterior and posterior canals (LARP/RALP), Operator Feedback, and Synchronized Room Video for the video record/playback mode.



**2014 ▼**

## **USB Impulse goggle**

ICS Impulse continues to evolve with a USB goggle along with software enhancements: Head Position Feedback for LARP/RALP, Hex plot, and high-resolution vector based graphics.



**2015 ▼**

## **Unprecedented vestibular choice**

Introduction of Monocular Video Frenzel, Positional and Oculomotor modules. Taking Head Position Feedback to the next level when assessing and treating BPPV. Expanding ICS Impulse with the ability to better determine if the disorder is central or peripheral. Always at the forefront with vHIT by implementing age normative data.

**2016 ▼**

## **Enhancing Diagnostic Accuracy**

Gaze Position and Gaze Graph, Suppression Head Impulse Paradigm (SHIMP), Saccade test, Torsional Analysis for SPV tests provide the information needed to accurately diagnose the patient.

## **About Otometrics**

Otometrics, a division of Natus, is the audiology industry leader. For more than 50 years, Otometrics has been helping hearing and balance care professionals improve the quality of life for their clients and patients by delivering expert knowledge, reliable solutions and services and trusted partnership.

Otometrics develops, manufactures and markets audiological, otoneurologic and vestibular instrumentation in more than 80 countries under the Otometrics brands, including Madsen®, Aurical®, Hortmann®, ICS®, Oscilla®, Otoscan® and Bio-logic®. Otometrics is a strategic business unit of Natus Medical Incorporated (North America NASDAQ: BABY)—a US-based leading provider of healthcare products, devices and services used in the newborn, neurology, sleep, hearing and balance markets. For more information, please visit [www.otometrics.com](http://www.otometrics.com) or [www.natus.com](http://www.natus.com).

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