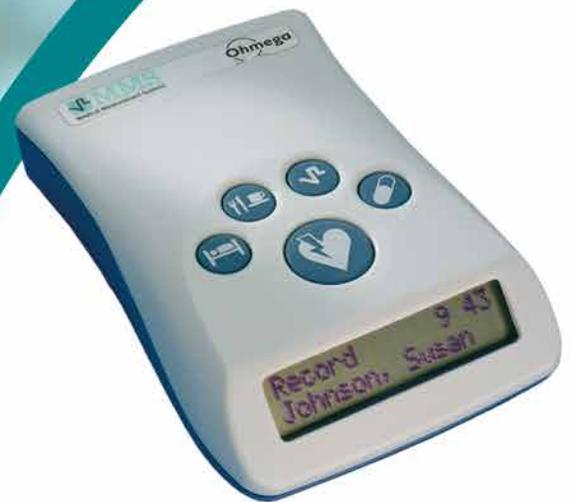
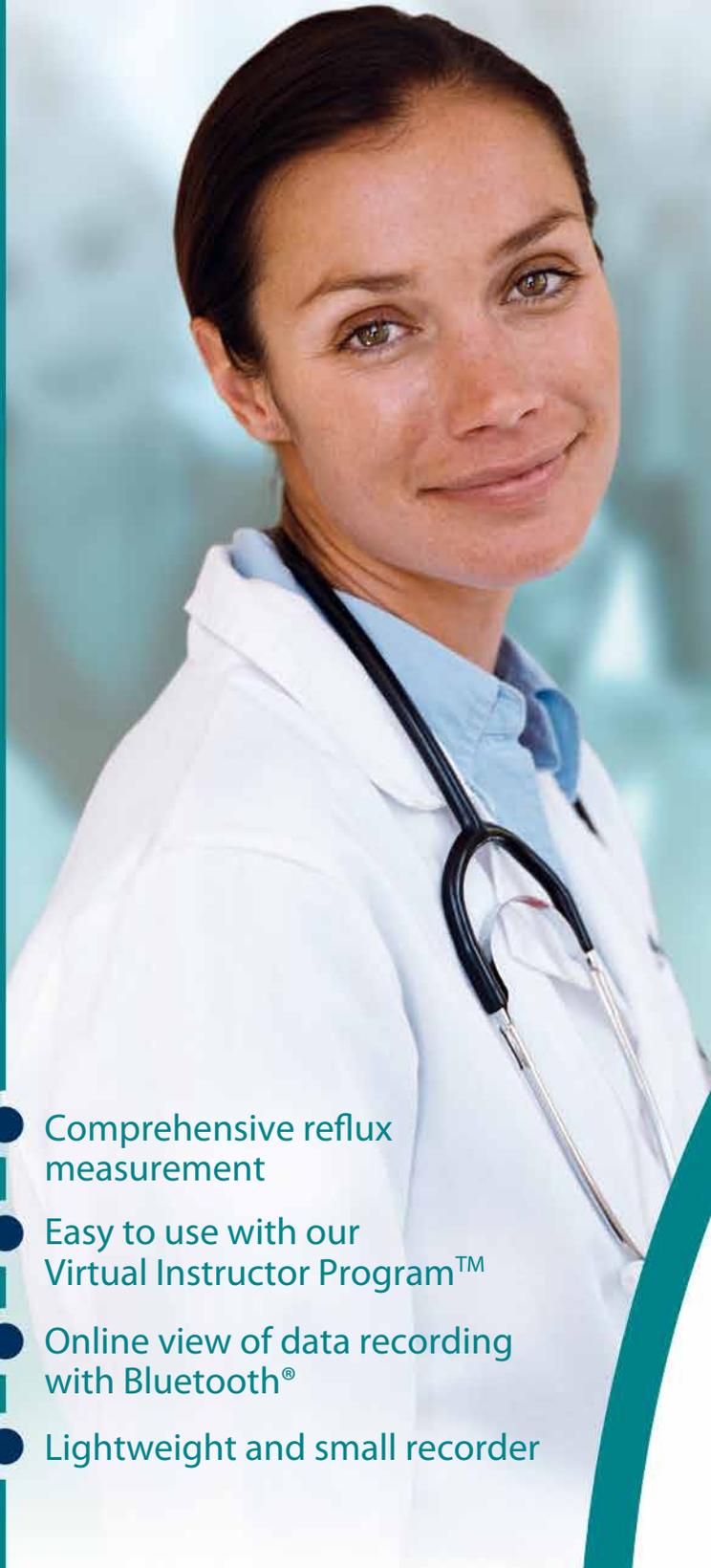


Ohmega

Ambulatory Impedance-pH Recorder



- Comprehensive reflux measurement
- Easy to use with our Virtual Instructor Program™
- Online view of data recording with Bluetooth®
- Lightweight and small recorder



Acidic and non-acidic esophageal reflux detection has never been more complete!

- Recording up to 12 Impedance and 4 pH channels
- Antimony or ISFET pH recording
- Symptom analysis software provides the user with information about the correlation between symptoms and events
- Virtual Instructor Program™ (VIP) guides the user to successfully complete reflux measurement procedures with minimal training
- Wireless Bluetooth® technology makes it possible to view data while recording
- High quality signal recording verified before the patient leaves the clinic
- Intermediate review of recorded data
- Normal values according to Zerbib^{1,2} et al.
- Children results for children younger than 18 years according to references values Misra³.
- Up to 4 pressures can be added to the Ohmega as an option



Patients can indicate pain and other events at the push of a button.

Ohmega: Complete reflux measurement

The Ohmega is a small and lightweight ambulatory system which combines Impedance recording and pH recording. As a result, the Ohmega detects reflux activity using Impedance and categorizes these reflux episodes as acidic or non-acidic (weakly acidic), using traditional pH measurement. Gas and mixed liquid/gas reflux episodes are analyzed as well.

Unique features

The Virtual Instructor Program™ helps to complete the procedure successfully with minimal training. Bluetooth® capabilities make it possible to view and check data on a computer monitor while recording. The intelligent symptom analysis software quantifies reflux episodes quickly and simply.

Diagnose patients on PPI therapy

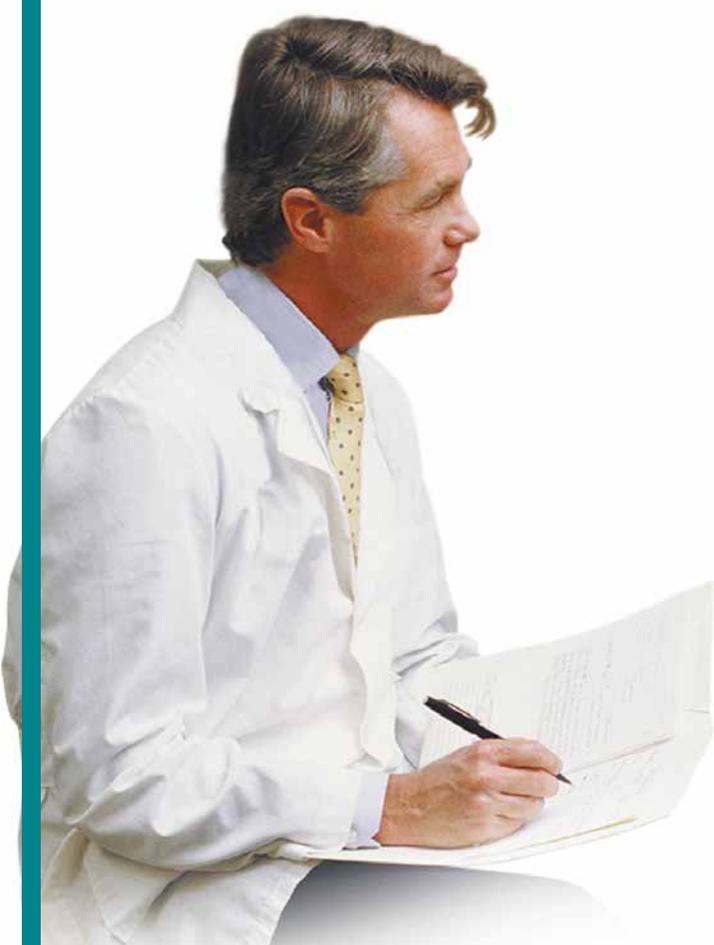
Gastro-Esophageal Reflux Disease (GERD) is caused by the reflux of gastric contents into the esophagus. Typical patient symptoms are heartburn, regurgitation, and chest pain. These patient groups are often on PPI medication, but non-acidic reflux can still cause symptoms. Traditional pH recording only records acidic pH reflux episodes. Impedance-pH detects both acidic and non-acidic reflux episodes.

Combined Impedance-pH recording is clinically useful in the evaluation of symptoms under PPI therapy, as well as for hoarseness, unexplained cough, and applications of particular interest.

¹ Zerbib et al., Normal values and day-to-day variability of 24-h ambulatory oesophageal impedance-pH monitoring in a Belgian-French cohort of healthy subjects, *Aliment Pharmacol Ther* 2005; 22: 1011-1021

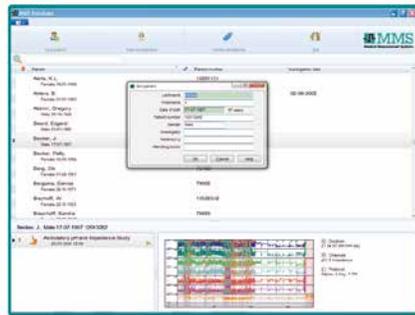
² Zerbib et al., Normal values of pharyngeal and esophageal twenty-four-hour pH impedance in individuals on and off therapy and interobserver reproducibility, *Clinical Gastroenterology and Hepatology* 2013; 11: 366-372

³ Dr. Misra, Can acid (pH) refluxes predict multichannel intraluminal impedance refluxes? A correlation study, *Journal of Gastroenterology and Hepatology* 25 (2010) 817-822

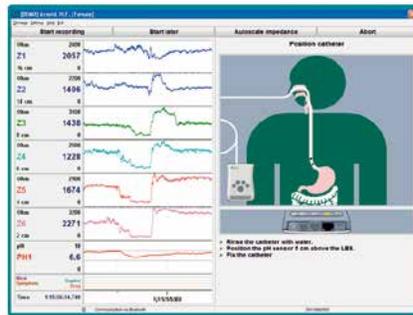


Virtual Instructor Program™ (VIP): Complete and successful esophageal reflux measurement in 6 steps!

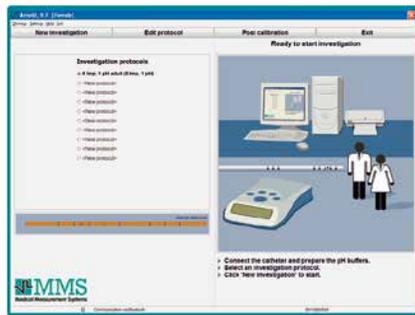
Laborie developed the Virtual Instructor Program™ to successfully guide users through the software program of the Ohmega. The pre-defined protocol includes questions and answers in database set-up, calibration, recording, and printing of results.



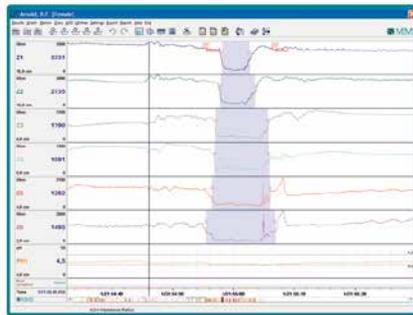
1. Select and enter a patient from database.



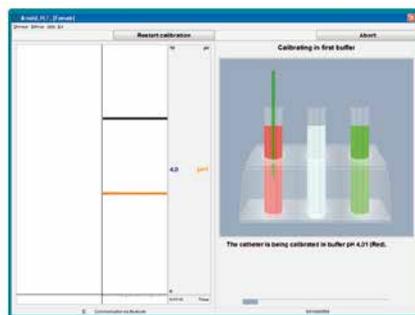
4. Position pH sensor (normally 5 cm above the LES). Instruct the patient on the use of recorder and send them away for the duration of the study.



2. Select a pre-defined Investigation protocol.



5. Download and review Impedance-pH data and acidic / non-acidic reflux markers.



3. VIP will then guide you through the calibration process.



6. Print your customized report.

Pediatrics

The Ohmega is lightweight and very small, which makes it easy to be carried around by children. With a special pediatric carrying bag, the examination is even more kid-friendly!

The Ohmega Impedance-pH recorder can be equipped with ISFET pH channels to better record alkaline pH (pH 7 and higher). Bluetooth® offers the opportunity to study the recorded data while the patient is playing or walking around.



Ohmega in pediatric bag

Solar GI Stationary Impedance & Manometry System

Multi-channel Intraluminal Impedance (MII) is a new technique available for the evaluation of esophageal bolus transit and reflux, similar to barium swallow, but without exposure to radiation. Combined with stationary manometry, detailed information is provided on the function of the esophagus.

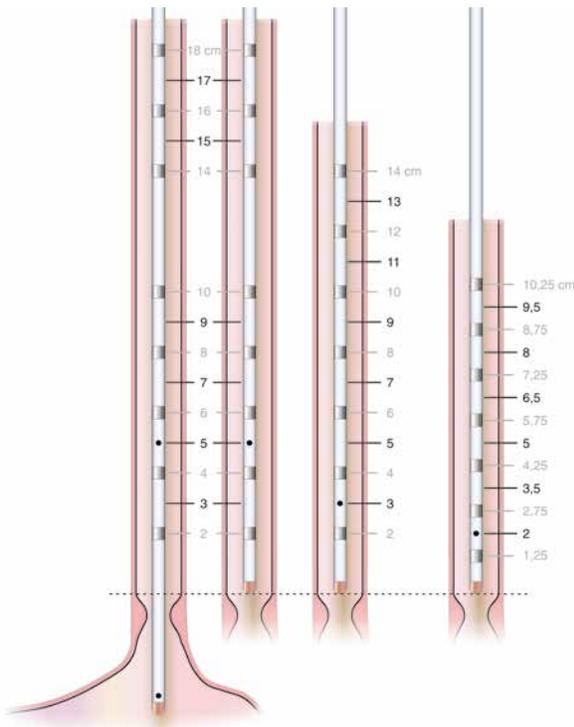
Solar GI records up to 16 Impedance channels and 36 Pressure channels. High Resolution Manometry (HRM), Video Swallow, and (High Resolution) Anorectal (HRAM) Manometry studies are available.



Solar GI HRM system

Ohmega Technical Specifications

Impedance channels	Up to 12
pH channels	4 Antimony, 2 ISFET
LES locator	Yes
Pressures	Up to 4
Data transmission	USB / Bluetooth®
Size	1.1 x 3.5 x 5.1 Inch (H x W x D)
Weight	210 grams incl. battery
Batteries	1 x AA
Impedance sample rate	50 Hz
Intermediate review	Yes
On-line view	Yes, via Bluetooth®
Pediatric carrying bag	Yes
Recording pH only	Yes, with standard pH probe



Laborie offers catheters with a wide variety of impedance and pH channels, as well as diameters.

Complete range of catheters

Laborie offers a broad range of Impedance and pH catheters. A wide variety in Impedance and pH channels, as well as diameters, are available. Laborie catheters are flexible, easy to insert, and have an internal reference electrode.

- Single use Impedance-pH catheters
- Multi-use Impedance-pH catheters
- Single use and reusable Antimony pH catheters
- Single use ISFET Impedance-pH catheters
- pH calibration kits
- pH buffer solutions



ZandorPH single use Impedance-pH and pH catheters



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