

Gastro CH₄ECK®



CH₄ (Methane) and H₂ (Hydrogen) Monitor

Accurate and real-time combined CH₄ and H₂ monitoring

A new member of the Bedfont Gastrolyzer family is due to be launched at the end of 2011. The portable desktop monitor measures both Hydrogen (H₂) and Methane (CH₄) levels in expired breath samples, with the ability to give both patient-side real-time readings as well as analyzing patient-samples using the breath-bag system. This monitor is intended for multi-patient use by healthcare professionals in a clinical environment.

Features

- Mains Powered
- Full colour LCD display
- Ease of Use
- Weekly calibration
- Fast warm-up time (< 20 minutes)
- Sample bag analysis port
- Direct sample analysis port
- USB connection to PC

How it works

Hydrogen and methane are produced when bacteria in the gut act on undigested carbohydrates such as lactose and fructose in the large or small intestine. The gases diffuse into the blood and are carried to the alveoli of the lungs. A breath test can then detect the presence and levels of hydrogen and methane in the expired air from the patient's breath.

The GastroCH₄ECK combined breath test instantly and accurately measures the amount of hydrogen and methane in a single expired breath. For direct sampling, patients simply breathe into the disposable mouthpiece and the result is displayed instantly on the screen. The GastroCH₄ECK can also be used for multi-patient analysis, using the breath-bag system to allow larger groups of patients to be tested simultaneously. The GastroCH₄ECK is a simple and affordable alternative to the traditional hydrogen and methane combined breath test or invasive procedures such as biopsies.

Disposable mouthpieces with integrated anti-bacterial filter, single-patient use bags and sample conditioning protection systems ensure the GastroCH₄ECK is user friendly, safe and reliable.

Applications

The GastroCH₄ECK combined methane and hydrogen breath monitor can be used to detect:

- Fructose intolerance and fructose malabsorption
- Lactose intolerance and lactose malabsorption
- Irritable bowel syndrome (IBS)
- Small intestinal bacterial overgrowth (SIBO)
- Intestinal transit time



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breath analysis is the new blood test

Specification

Power Supply:	Mains power 240 V [110 – 240 compatible]
Warm-up time:	< 20 minutes
Calibration frequency:	Once a week
Detection Principle:	Electrochemical and Optical sensors
Operating temperature:	0 – 40 degrees C
Operating Humidity:	0 – 100%
Dimensions:	300 x 265 x 140 mm
Weight:	Approx. 6kg

Gas Ranges

Gases measured:	CH ₄ (Methane) H ₂ (Hydrogen) O ₂ (Oxygen)
Range:	CH ₄ 0 – 200 ppm H ₂ 0 – 200 ppm O ₂ 0 – 21%
Accuracy:	CH ₄ Resolution: 1 ppm Accuracy: +/- (2% of range or 2% of reading) ¹ H ₂ Resolution: 1 ppm Accuracy: ± 5% O ₂ Resolution: 0.1% Accuracy: +/- 2% full scale
Response time, T ₉₀	CH ₄ Typically <45 seconds H ₂ Typically <45 seconds O ₂ Typically <45 seconds

¹Conditions during factory calibration, typically 20°C, 1,000 mBar

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