## A flexible system for a wide variety of clinical, research and private-practice medical applications

The applications of the Body Monitoring System are numerous. Many clinical and research programs can benefit from an affordable, accurate, and wearable method of monitoring a patient or subject's lifestyle outside the confines of the lab or physician's office. The system is invaluable in any program where it is required to track and monitor energy expenditure, physical activity, lifestyle and quality of life, behavior, stress level, or other related data.

Possible applications include

Diabetes Endocrinology Obesity Metabolic Disorders Nutrition Gastroenterology Pediatrics Pulmonary COPD Sleep Research Cardiology Rehabilitation Neurology Geriatrics Internal Medicine Clinical Trials Preventive Medicine Wellness/fitness Occupational Medicine And more



Used by clinical and research departments worldwide, the Body Monitoring System and SenseWear Armband is scientifically-validated and featured in dozens of protocols and white papers. An up-to-date bibliography is available upon request from your local BodyMedia distributor.

#### Technical Specifications, Armband:

Weight with adjustable strap: 82.2g (2.9 oz) Size: 88.4mm x 56.4mm x 21.4mm (3.45 in x 2.2 in x 0.85 in) Power: 1 AAA size battery, 1.5 V, commercially available Materials: Armband Monitor: ABS, urethane, FDA approved co-polyester, hypoallergenic grade stainless steel Adjustable strap: nylon, polyester, poly-isoprene (latex free)

*Temperature / humidity of operation:* 0° C - 45° C / 100% RH Internal memory size: 12 days (at 1 min sampling frequency)

### The Bodymedia<sup>®</sup> Body Monitoring System comes with:

- 1 Monitor SenseWear PRO<sub>2</sub> Armband
- 2 Adjustable straps (normal and large) with velcro strap (pediatric size optional)
- 1 USB cable
- 2 batteries, 1.5 V, AAA size
- Multilanguage Quick reference Getting Started Guide with instructions for first use and installation.
- Multilanguage Software InnerView (with 30 days trial of InnerView Professional) with on-line help manual
- Multilanguage Operator Manual

SenseWear PRO<sub>2</sub> Armband: product Class IIa, CE 0051 Design and specifications are subject to change without notice.

#### Marketed by:

122 Temporary St. Madeupville, NY 15515 USA P.124.141.5123 F.414.121.4124 www.yahoo.com



4 Smithfield Street 11th Floor Pittsburgh, PA 15222 USA P.412.288.9901 F.412.288.9902 www.bodymedia.com



Bodymedia International Srl Via G. Balzaretti, 15 20133 Milan, Italy P.+39-02-2774121 F.+39-02-27741250 e-mail: info@armband.it www.armband.it Wearable metabolic physical activity and lifestyle monitoring

### Today

Daily Energy Expenditure 2,146 Calories Physical Activity Duration (PAD) 0 hrs 25 min Average METS Level 1.4 Total Number of Steps 6,498 Sleep Duration 7 hrs 48 min Last 7 Days

Daily Average **2,027** Calories





## Introducing the BodyMedia<sup>®</sup> Body Monitoring System

A versatile, clinically-validated lifestyle monitoring system that allows you to see your patients' day-to-day metabolic physical activity and more

The BodyMedia Body Monitoring System acts as a *metabolic* Holter monitor, allowing you to conveniently collect and analyze accurate metabolic physical activity and lifestyle information about your patients in a free-living context.

The system includes the SenseWear<sup>®</sup> Armband, a comfortable, clinically-validated device that is worn on the back of the upper arm. The Armband continuously

records an array of physiological data. The collected data is then analyzed and organized into graphs and reports that clearly display your

# Ideal for a variety of clinical and research applications

patients' energy expenditure (caloriesburned), duration and level of physical activity, number of steps taken, and sleep/wake states.

The slim design of the Armband minimizes interference with the day-to-day activity of the patient. It can be discreetly worn under clothing and, unlike other types of single-sensor monitors, patients can comfortably wear the monitor while sleeping, exercising or simply going about their daily routine. These features make the Armband ideal for a variety of clinical and research applications.

The Body Monitoring System provides two methods for collecting data from your patients. You can simply give your patients an Armband and have them return it at the end of the monitoring period. The Armband will hold up to 12 days of continuous data which you can download and analyze using our InnerView<sup>®</sup> or InnerView<sup>®</sup> Professional Software. Alternatively, you can give your patients a simple software application (InnerView<sup>®</sup> Retrieve) to take with them so they can retrieve the data file and e-mail it to you.

#### Versatile

The monitor integrates 4 physiological sensors that can identify a broad range of body statistics and activity contexts making it an ideal tool for a variety of clinical applications.

#### Affordable and Accurate Metabolic carts are very accurate but expensive and not suited for long-term measurements. Pedon eters and accelerometers are less expensive but not accurate. The SenseWear Armband is both affordable and accurate.

### The SenseWear<sup>®</sup> Armband employs four physiological sensors

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- 1. Skin temperature measures change in the surface temperature of the skin
- 2. Galvanic Skin Response measures sweat and the dilation of the sweat glands
- 3. Heat Flux sensors measures the rate at which heat is dissipating from the body
- 4. 2-axis Accelerometer measures motion

## These sensors, combined with our advanced algorithms, calculate and report:

- ✓ Total energy expenditure (kCal)
- ✓ Active energy expenditure (kCal)
- .. **•** Resting energy expenditure (kCal)
- ····► METS
- Total number of steps
- Physical activity duration (PAD)
- Sleep duration
- Lying down

#### Comfortable

The slim, ergonomic design doesn't interfere with day-to-day activities such as work, exercising or sleeping so it can be worn under clothing for short or long periods of time. It's so comfortable, your patients will forget they even have it on!

#### Easy to use

Designed with user-friendliness in mind, the Armband is easy to slip on and off. To ensure proper use, it simply turns on when you put it on and turns off when you remove it from your arm.

## Gain new insight into your patients' daily metabolic and physical lifestyle with our InnerView<sup>®</sup> suite of software

The InnerView software applications allow you to easily upload, annotate, analyze and share data recorded with the SenseWear Armband.

InnerView<sup>®</sup> Professional includes advanced algorithms that accurately process your patients' continuous body data into information you can use. The software allows you to easily graph data and print reports. Advanced features let you customize the collection rate of each of the sensor channels as well as the METS levels that determine different levels of activity, from sedentary to very vigorous.



#### Easily export data

InnerView Professional allows you to export all the recorded raw signals and derived data to other data analysis packages such as Excel or Matlab, for research applications or further analysis.

#### Make graphs and generate reports

InnerView Professional is designed so you can quickly view and generate reports and graphical presentations of your patients' lifestyle and share them with your patients or colleagues.

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#### Quickly analyze data

In only a few seconds you can view the data just downloaded from the Armband on your computer. You can select specific time periods or events from the recorded period, view the results, zoom in and out, and select information you want to view in a report.



The BodyMonitoring System gives you two convenient ways to collect patient data



Patient returns Armband