

VS100 patch-based vital signs monitor

Plug 'n play wireless ECG, heart rate, skin temperature and motion system, suitable for integration into existing and new medical products.



Size: 60mm x 43mm x 16.5mm

Weight: <50g (incl. battery)

vitalsens is part of a growing family of Intelesens devices which are optimised for minimum motion artefact, using revolutionary patch electrodes developed over many years for a range applications including use in a number of space missions.

The **vitalsens** device facilitates the measurement and reporting of ECG, heartrate, skin surface temperature and motion. The device can be configured for two different modes of data collection:

- i) periodic data transfer via Bluetooth® (frequency configurable – default: 15 minutes)
- ii) live data streaming via Bluetooth®

Transmitted data can then be viewed in real time or logged for further analysis.

FEATURES

- Data Acquisition of ECG / Heart rate, Motion and Temperature
- Periodic transmission of Vital Signs (default: every 15 minutes) or Live streaming of Vital Signs data
- Separate sensors replaced with one vital signs patch electrode and clip-on device
- Minimum signal path from electrode to electronics produces clearer signals
- Unobtrusive to wear
- Highly miniaturised reusable body-worn wireless sensor / compact and lightweight design.
- Non-irritant, easy-to-apply patch electrodes for high quality collection of data
- Rechargeable Lithium Ion Battery

Manufacturer Details

For further information on Vitalsens devices, contact
Intelesens Ltd, 4 Heron Road, Belfast, BT3 9LE, N.Ireland, UK
Tel + 44 (0)84 5838 6243 **Fax** +44 (0)84 5838 6241
Email info@intelesens.com **Web** www.intelesens.com

POTENTIAL USES

vitalsens is designed to provide wireless ECG, heart rate, skin surface temperature and motion for any existing or new product. It is designed to be rapidly added to or integrated into medical devices or systems.

- Removing the wires from bedside monitors
- Adding ECG to home-based telemonitoring systems
- Creation of local monitoring eg all the beds in a ward
- Research into ECG-related areas

Using this tested platform offers a much quicker and safer route to market for OEMs.

TECHNICAL INFO

Bluetooth

Class II: Transmits data up to 10m
Standard Bluetooth Serial Port
Profile interface

Electrodes

Innovative patch design
24 hour wear
Disposable
Minimal motion artefact
Easy to apply
Non-irritant
Comfortable to wear

ECG / Heart rate

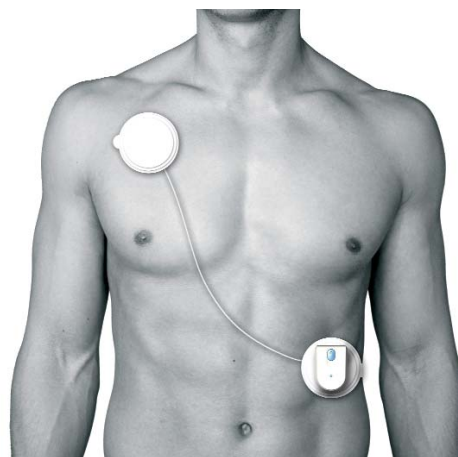
Lead II
Sample Rate: 360 samples per sec
Resolution: 12 bit

Accelerometer

3-axis
Sensitivity: $\pm 2G / \pm 6G$
Sample Rate: 40Hz/160Hz
Resolution: 16 bit

Skin Surface Temperature

Temperature sensor built into electrode
Sample Rate: 10 samples per sec
Resolution: 12 bit
Range: 20 – 45°C



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