zensor
For life yet lived

Intelesens Electrode Arrays

Motion artefact

Intelesens's patented electrode design optimises signal collection and minimises artefact impact. The effect of motion artefact is one of the most commonly cited downfalls of traditional ECG and vital signs monitors. In standard Holter or Event Monitors, basic movement can significantly worsen the signal quality due to motion artefact, which in turn can give rise to false positive and false negative alerts which can hamper accurate diagnosis. Intelesens's electrode arrays are made using bespoke materials and processes providing superior outcomes when compared with off-the-shelf electrodes. The end result is data of consistently higher quality, offering faster diagnosis and more efficient and effective patient monitoring.

Silver electrode

Intelesens utilises bespoke materials and patented design and thick-film manufacturing processes to produce precision silver electrodes. This combination of materials and process produces high efficiency, low noise electrodes optimised for ECG and impedance pneumography signal collection.

Hydrogel

Proprietary hydrogel is used as a conductive bridge to reduce the impedance path between the skin and the active silver electrodes. All of the electrode array components work together to provide consistent, clean data allowing our embedded algorithms to compute clear and relevant diagnostic data.

3-Lead ECG
Motion Artefact Reduction
Respiration
Better Quality Data

Features and Benefits:

- Increased probabiility of arrhythmia detection
- Resilient Connectiion between skin and device
- 'Lead II' best for viewing arrhythmias
- More accurancy
- Improving efficency
- Saving time
- Hydrogel and foam patch
- Discreet & flatter profile

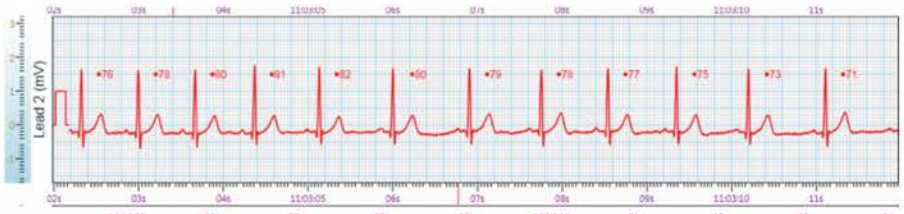
The Foam Patch

The adhesive foam material used provides a strong, flexible and safe mechanical bond between patient and sensor. It also keeps the hydrogel securely in place, ensuring that when the patient is ambulatory there remains a strong, intimate skin-hydrogel-electrode interface with minimal relative movement helping eliminate motion artefact. Electrodes can be worn for up to 3 - 7 days, depending on patient activity and skin type.

The Magnetic Studs

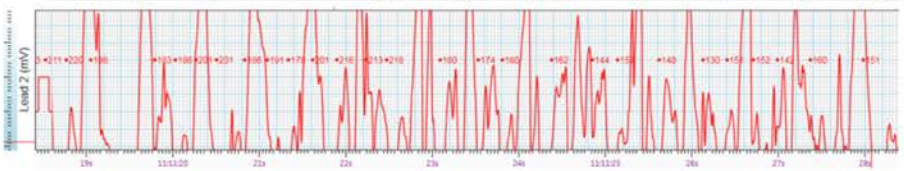
Intelesens's patented, proprietary studs allow the zensor device to be attached magnetically and securely to the disposable patch. They provide a resilient, strong connection, with very low electrical impedance, optimising signal quality. Due to the magnetic nature of the connection as opposed to a mechanical clip, users with limited dexterity can easily remove and reconnect the device to the electrodes in order to change the battery. Below are shown examples of data using Intelesens electrodes compared with data from commonly used off- the-shelf electrodes in the following scenarios: patient sitting, patient walking and patient climbing stairs.

Commonly Used Electrodes: Sitting

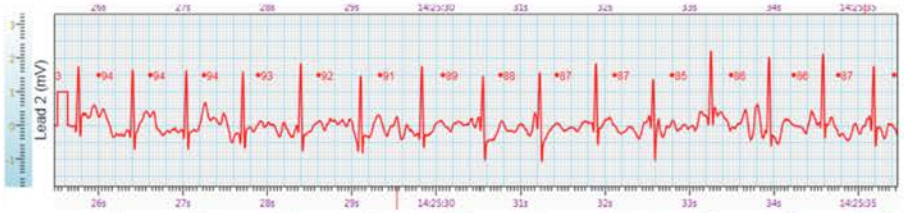


zensor Electrode: Sitting

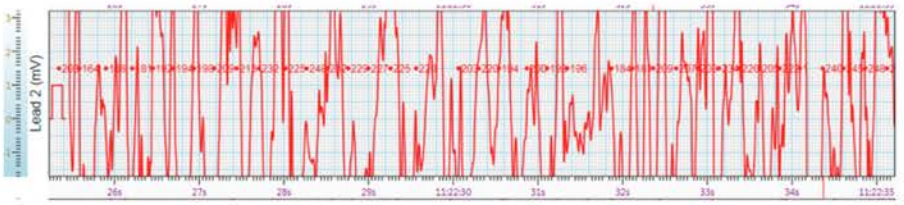
Commonly Used Electrodes: Walking



zensor Electrode: Walking



Commonly Used Electrode: Stairs



zensor Electrodes: Stairs

Let's Talk

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