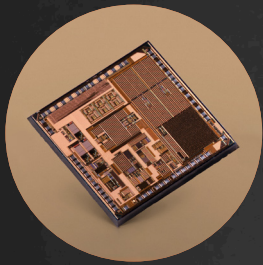


# COOPERATIVE SENSORS

Multi-parameter sensing platform for medical wearables



:: csem



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# COOPERATIVE SENSORS

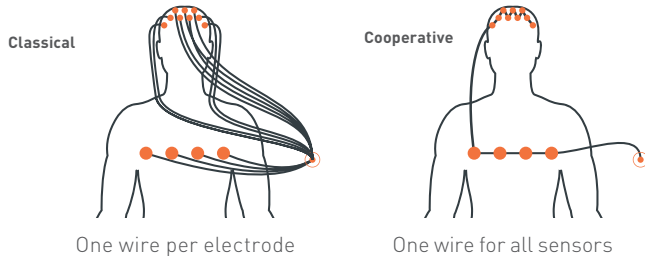
## High-quality data

Cooperative sensors are active electrodes characterized by exceptional performance when used with dry electrodes. They provide signals (e.g., ECG and transthoracic impedance) of outstanding quality not only at rest, but also in motion.



## Low connectivity constraints

The classical approach requires one wire per electrode. In contrast, cooperative sensors are all connected by a single, unshielded wire. This makes integration easy and low-cost even with a high number of sensors.



## Technology compatible with existing production processes

Cooperative sensors require complex electronic circuits which are easily miniaturized and manufactured with classical processes.

## Proven disruptive technology

Cooperative sensors have been demonstrated in several form factors and validated against state-of-the-art medical products in clinical trials. The technology has been extended to measure other forms of signals, including SpO2, HR, HRV, BR, BSP, EIT, PHG and T. The richness of available synchronized physiological signals allows the computation of meta signals, such as PAP (pulmonary artery pressure).

## Key advantages

- six families of patents
- medical development [CSEM Medtech is ISO 13485 certified]
- dry electrodes
- low-cost textile integration
- medical applications
- imaging wearables
- meta signals

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