

Energy Monitoring Solution



Challenges

Monitoring real-time energy use without disruption

Monitoring energy use at a granular level can help organisations reduce their energy use, also making cost savings. But understanding where and how to energy reduction or monitoring changes can present an issue if real-time data is not available.

Challenges can include:

- Not having the means to evaluate consumption and implement better practices
- Finding discreet, unobtrusive and easy to fit systems which cause minimum down time and disruption
- Outdated equipment causing suboptimal performance
- Machines left running when operations have finished



The Pressac energy monitoring solution:

Measure energy use at circuit, zone or machine level

Our EnOcean® current transducers (CT) are wireless and self-powered using ultra-low energy from the measured conductor and require no batteries, making them easy to maintain. They are also easy to install by simply clipping around cables with minimal interruption to electrical supply. They measure real-time current usage at circuit, zone or machine level, so you can track your usage over time, identify how and where you can make energy savings. Our wireless CT clamps simply clip around cables, so there's minimal disruption or production downtime.

This data is sent to the smart gateway, where it's converted and delivered to AWS IoT Core to be analysed and reviewed. From here, you can make informed decisions about energy use with the potential to save money.

Benefits

The energy monitoring solution measures current use at a granular level, giving you real-time live data to inform your decision making.



See real-time usage

Access live data from current consumption sensors to see where energy is being used.



Monitor equipment

See which assets are switched on, ensure critical assets are functioning correctly and switch off assets not in use.



Track use over time

Continuous monitoring lets you identify where you use and waste the most energy, allowing you to find energy saving solutions.



View the live data

The Pressac smart gateway converts the sensor data to industry-standard JSON and makes it available to the AWS platform.

Pressac on AWS

Our sensors and Gateway interact directly with AWS, allowing you to effectively monitor your buildings. This means you can rest assured your connected technology projects will run seamlessly, using our combined end-to-end solution. The sensors, gateway and software synchronise perfectly to give you accessible data, in turn helping you use your energy more efficiently.

Features



Collects energy and data

- Small, unobtrusive sensors measure the real time current usage at machine, room or zone level.
- Tracks current use over time to identify where current is used and wasted.
- Use this data to make effective decisions about energy use and where saving could be made.



Self powered

- Self-powered using ultra-low energy from the measured conductor, so there's no need for batteries or wiring
- Energy harvesting using the EnOcean® protocol means the sensors are ultra low power, drawing tiny amounts of energy from their environment
- These can be retrofitted, are extremely easy to install and are very low maintenance

EnOcean

Pressac Sensing products incorporate EnOcean® wireless technology and are fully compliant with EnOcean protocols. The international standard is - ISO/IEC 14543-3-10, which can be downloaded from www.iso.org



Case Study: Sensorfact



Challenges

Software provider Sensorfact create energy management software for the manufacturing industry, helping businesses understand their energy consumption and the potential to make savings. They needed to find a system which could accurately measure data at machine level, without the need to stop production or make a large up-front investment.



Solution

Pressac's wireless CT clamps met their criteria perfectly. Easy to install, they simply clip around a machine or phase. Energy-harvesting technology also makes them low maintenance. Sensorfact used the sensors in their own office, then trialled the system with a customer before rolling it out.



Results

The sensors report current consumed by each machine every 30 seconds, feeding the data through Sensorfact's software – the company already uses the AWS platform. On average, these insights have helped Sensorfact's customers use 10% less energy. Their energy-monitoring solution is now used by brands including McDonald's, Heineken and Schiphol Amsterdam Airport.

Get started with Pressac solutions on AWS

Visit the AWS Device Catalog or www.Pressac.com/buy to purchase.