

Transducers are the hidden heart of power electronics

You use LEM transducers every day. They are present in trains, buses, lifts, cars and they help to protect vital equipment in hospitals, airports and data centres. They are in industrial motors, electric vehicles, solar panels and wind turbines as well as in battery-backed uninterruptible power supplies (UPS) that provide continuous power to computer servers.

LEM transducers help to make your world safer and more energy efficient. They provide the feedback signal which helps to control the motors which drive a vast number of machines, measuring complex currents and voltages from as little as 0.1 A in drills, to 20000 A in electrolysis equipment and up to 10000 V in the traction control for trains.

With higher accuracy and speed, the feedback signal from LEM transducers enables smoother control and operation. They also help to reduce energy consumption by 30% or more through the intelligent control of variable speed drives.

At the heart of ... industry

LEM transducers help to make your world a smoother place. In lifts, for example, they help to prevent the doors closing on passengers. They keep the cabin stable when people enter and ensure that the lift rises and falls smoothly by adjusting the torque of the motor. Their signals are also used to stop the lift at exactly the right level.



At the heart of ... transport

Trains propulsion is provided by electric motors driven by inverters. These inverters rely on LEM transducers to measure, optimise and adjust the power that is sent to the motors, improving both performance and reliability. In electric and hybrid cars, LEM transducers monitor energy levels to and from the battery as well as saving energy by controlling electric power steering.



At the heart of ... renewable energy

LEM transducers, specifically designed for renewable power systems, control the energy flow and waveform of power sent to the grid from photovoltaic and other renewable energy systems. They measure the current to help optimally position the turbine to the wind and to



use the photovoltaic panels to their maximum efficiency in a safe manner.

At the heart of ... uninterruptible power

Imagine a world where power can fail. A world in which data centres lose their data, hospital equipment stops working and systems come to standstill. Wherever continuous, uninterruptible power is critical, LEM's Sentinel Battery Monitoring System can monitor the condition of standby batteries to ensure that they are always ready to supply emergency back-up power.

LEM ... at the heart of the future

Intelligent power management is critical for conserving energy. As the world's leading manufacturer of transducers, LEM is helping the world to move towards a greener, more energy-efficient future with products such as the Wi-LEM Wireless Local Energy Meter. By showing users exactly how much power is being used, Wi-LEM helps them to protect the future by reducing their power consumption.