Eaton’s supercapacitors help make vehicles safe in emergency situations

As vehicles such as automobiles, rail cars and commercial trucks get more technologically complex and electrified, so do safety, tracking needs and capabilities of those vehicles. Eighty percent of motorists say that safety technologies are important when buying a car. Eaton has developed several products – TV, HV and PHV supercapacitors – that enhance the security and safety of a vehicle, including the active safety systems, adaptive cruise control, collision avoidance passive safety systems, airbag clusters and active suspension systems.

Eaton recognizes the need for safety in vehicles at all times, but especially during an accident or even a mechanical failure. The company’s TV family of 3-volt supercapacitors allow the door locks to still open should the battery die or is disconnected in an accident (as required in electric vehicles).

Global Positioning System (GPS) technology has become more prevalent for all types of transportation vehicles. It not only helps guide us to our destination, it also helps to locate a vehicle in an emergency. Supercapacitors allow GPS location to be transmitted if a car accident occurs and the battery is disconnected. This can mean the difference in getting the help you desperately need, or being able to exit an unsafe vehicle.

Eaton supercapacitors are highly-reliable, high-power, ultra-high capacitance energy storage solutions tailored to specific applications. They can be applied as the sole energy storage or in combination with batteries to optimize cost, life time and run time.

System requirements can range from a few microwatts to kilowatts. All products feature low ESR for high power density with environmentally friendly materials. Eaton supercapacitors are maintenance-free with long lifetimes and can operate in temperatures from -40 °C to +65 °C.

(1) StopTheCrash.org