

Electricity conversion efficiency of up to 3 times!

An inverter for HV

Myway Plus (Yokohama city, President Osamu Hoshino) has developed a hybrid car inverter where the conventional conversion efficiency is increased up to 3 times. Due to her small energy loss and light weight, it is possible to increase cruising distance. The inverter is suitable for markets such as automotive parts manufacturers and finished electric vehicles.

The product was developed by using adopting SiC, a material which can increase electric conversion efficiency, into the inverter. The energy loss was reduced to 1.5% during electricity conversion. Silicon semiconductors are widely used in products, but it's the 1st time that SiC is incorporated into the automotive industry.

An inverter is a key component in eco-car which plays an important part to regulate optimum current and voltage to the motor. In usual cases, an addition of 5-10kg can contribute to a heavy weight. A highly efficient inverter in an eco-car not only allows a car to cruise long distances, the compact size made with heat dissipating material can fit into a vehicle conveniently. The developed inverter is sold as a device prototype in the market today. Once car manufacturers developed it to improve their car improvement, the same inverter will undergo mass production. The weight of the inverter which produces a power output of 50kW is expected to be half of the others used in EV. Myway Plus targets to deliver 100 units in 3 years.

Myway Plus specializes in development and performance testing for HV/EV components and devices of leading car manufacturers in Japan. In recent years, the company is also placing a strong focus on customized product development.



Suppression of energy loss in the SiC inverter

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