

Mobile Electrical Storage Device

Half size, water and dust proof

The hybrid car battery evaluation device company, Myway Plus Co. Ltd (Yokohama-shi, President Osamu Hoshino), together with IHI and Alps Electric, have developed a mobile electrical storage system. The product is half the size compared to conventional products, and it is also the world's first water and dust proof mobile electrical energy storage system. It can be used under the scorching sun or in rain, and expected to be an alternative to the generator in outdoor construction and disaster.

The developed compact storage system is 30cm by 40cm by 66cm. Upon attaching wheels to the lower body, it is moveable. The hourly output is 1500Watts (momentum is 3000Watts). Not only can the system be used for drill and high power pump, it can also operate the television up to 14hours and electric stove up to 2.5hours.

For such a high output battery, it is usually immobile after installation. Even in an active generator, ventilation problem arises from securing fuel and noise. User can continue to use this high power product while suppressing noises.

Myway Plus Co. Ltd utilized her technology developed from HV battery evaluation. Some examples include: incorporating transformer devices (ie. inverters) into the storage system, accelerating the conversion timing of transformer equipment voltage, reducing coils and reducing substrate to minimize the size.

Silicon carbide (SiC), a high melting temperature semiconductor used in power semiconductor voltage conversion, is adopted. On top of that, IHI lithium-ion batteries "iron phosphate", which can endure a thermal runaway up to 400° C or more, is also used.

After removal of cooling fan, in order to seal the water-vulnerable electrical circuit, the water and dust proof IP65 was used.

Charging using household electrical outlet takes about 5hours (1 hour fast charge). Alternatively, the system can be charged by solar panels. Up to 3 consolidated units in connection. Although the price is undecided, it is expected to about 1.2 million yen,

costing slightly 5-10% more expensive as compared to similar storage system.

Besides conducting sales through a specialized trading company, supply as OEM to IHI and Nagase will also begin in November. Myway Plus Co. Ltd aims to sell 300 units in the first year, and 2000 units in 2-3years.

Myway Plus Co. Ltd is not only entrusted with the development of HV/HEV parts and equipment for leading car manufacturers in Japan, they also handle performance testing operations.



Generation of high power pump and drill

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