

CHANGEABLE BATTERIES

Pilot project in Berlin started

The 48-V batteries by Greenpack are re-chargeable and can be loaded in dedicated sharing stations. They feature continuous current of 30 A.



The re-chargeable Li-on batteries are equipped with two CAN interfaces to communicate with the charger in the sharing stations (Photo: Greenpack)

In September, the pilot project on exchangeable and re-chargeable batteries was started. Owner of battery-powered vehicles using the product from Greenpack (Germany) can now change their empty batteries against full-loaded ones at eight locations in the German capital. The batteries measure 88 mm x 217 mm x 368 mm. They are used in different vehicles: e-scooter by Emco Nova, e-bikes by Evolo, Gobax, and Cycles Maximus, for example. The CAN-connectable batteries are also implemented in the Volotaxi Cruiser. Additionally, they are applied in some electrical-powered mobile machines: Michaelis KM A10 weed brush and Koepl Compact-Easy multi-tool machine.

Heinzmann (Germany), a manufacturer of drivetrains, cooperates with Greenpack. The company provides motors and electronics for pedelecs and e-bikes. The battery modules can be used in single-mode or in a cluster. They can be charged using electricity produced from renewable energy. When fully charged, they can stay in the sharing station until they are exchanged against a discharged one. This is an “open” source project: Any company can manufacture them, if the company agrees to adhere to the standards. Thus, cell chemistry, capacity, current limits, and allowable temperature can differ. The identification system ensures the appropriate charging strategy and limits the discharge current to allowable levels, even if used in a cluster. The ability to cluster individual battery modules in various applications allows arranging different battery systems. The capacity ranges from 680 Wh to 1400 Wh. The weight is between 7 kg and 9 kg. Re-charging cycles are more than 1000.

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