

Flexible large storage battery for industrial applications

ViZn Energy System's Z.20 battery is based on an innovative zinc iron redox flow battery. This technology is 100 percent eco-friendly. The Z.20 battery can be easily integrated into both existing and new applications and micro-grids.

The battery system is called Z.20, because it is housed in modular units of ISO 20ft shipping containers. This ensures cost-effective transportation as well as quick and simple installation and worldwide deployment.

A Z.20 unit contains 3-5 battery stacks, pumps and electrolyte tanks which store the energy. The Z.20 is capable of storing 160 kWh of energy and outputting between a maximum of 80 kW for a period of 2 hours or 28 kW for 5.65 hours discharge time.

Suitable for any situation

Due to the modular concept, up to 16 units of Z.20 can be connected with a transformer in series leading to an overall energy output of 0,75 – 1,3 MW. System performance and capacity are fully scalable, ranging from Kilowatts to Megawatts. The battery's turnaround efficiency including its own power consumption is 75 percent. With 10,000 full-depth charge and discharge cycles the battery has an overall lifetime of more than 25 years when used daily.

Clean and safe

The blue.sky energy technology is 100 percent eco-friendly. It was part of the product strategy to only use environment-friendly materials. For example, zinc and iron are natural, worldwide available raw materials. The required electrolyte is made by simply mixing a concentrate with water obtained locally at the customer's site.

The ViZn Z.20 battery is non-toxic, non-explosive and non-flammable, it can therefore be safely used in cities and urban areas.

