

SolarTech Power Solutions

Portable mobile power supply structure design



Overview

What are the components of a power supply?

The main components are a transformer, a cooling system, a high voltage switchgear, a low voltage switchgear, a metering system, a protection relaying system, an AC and DC auxiliary power supply, a surge protection system, and a cable connecting system.

Why should you choose a mobile substation?

Reliability: Mobile substations are factory-tested and ready-to-connect units that ensure high-quality and high-performance power supply. They are equipped with state-of-the-art equipment and advanced control, protection, and communication systems that enable local and remote monitoring and control.

What are the design considerations of a mobile substation?

Some of the main design considerations are: **Transformer:** The transformer is the main component of a mobile substation that converts high voltage to low voltage or vice versa. The transformer has to be designed to optimize its size and weight for transportability and required electrical parameters.

Are Mobile substations a cost-effective solution?

Economy: Mobile substations are cost-effective solutions that save time and money for customers. They reduce capital expenditure (CAPEX) by avoiding permanent construction costs and land acquisition costs. They also reduce operational expenditure (OPEX) by minimizing maintenance costs and energy losses.

What voltages are available for a mobile substation?

Voltages available are up to 230kV with MVA ratings routinely up to around 40+ MVA (3-phase on single trailer). Elgin always utilizes the best available materials and our mobile substations typically come standard with hydraulic

trailer steering.

Where are Elgin power solutions Mobile substations made?

All Elgin Power Solutions mobile substations are crafted and rigorously tested at our state-of-the-art facility in West Virginia. The entire assembly, including transformers, trailers, and structural steel, is manufactured in the USA.

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Contact Us

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