

What is the principle of wind power generation for base station backup power supply





Overview

What is the principle of wind power generation?

The principle of wind power generation is to use wind power to drive the rotation of the windmill blades, and then increase the speed of rotation by the speed increaser to promote the generator to generate electricity. Generator structure Wind turbines are power machines that convert wind energy into mechanical work, also known as windmills.

What is wind power generation?

Wind power generation is power generation that converts wind energy into electric energy. The wind generating set absorbs wind energy with a specially designed blade and converts wind energy to mechanical energy, which further drives the generator rotating and realizes conversion of wind energy to electric energy.

What is wind power?

The wind power is one of the indirect solar energy technologies. The wind is the air in motion resulting from the pressure gradient caused by solar radiation. About two per cent of the solar radiation reaching the earth's surface is converted to kinetic energy and this is sufficient to meet the energy demands if it is harnessed.

How does a wind turbine generator work?

The generator converts mechanical energy into electrical power. The generated electricity is directed to a substation, adjusted to match grid voltage, and then sent to the power grid. The Wind Turbine Generator (WTG) is crucial for converting mechanical energy from the turbine's rotation into electrical energy.



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