WIND POWER GENERATION TRAINER



Overview

This option of the Wind Power Generation Trainer can work in both off-grid and on-grid modes. It consists of a wind tunnel and a real wind turbine-generator set. The trainer allows to simulate real wind and investigate the generator performance in different wind speeds. In off-grid mode it allows to investigate the battery charging process using an AC charge controller and also the discharge using an AC-DC Inverter and loads. In on-grid mode it allows to implement the synchronization with the mains power grid.

YouTube Link: https://youtu.be/AqVeRIMnY9A

Topics covered

- Structure and characteristics of wind turbines and wind power plants working off-grid.
- Structure and characteristics of wind generators used in wind power plants.
- ✓ Characteristics of electrical loads of wind power plants.
- Characteristics of on-grid wind power plant depending on airflow
- Characteristics of wind power plant in battery charging mode.
- Characteristics of off-grid wind power plant supplying the load.
- Protection in wind power plant in case of emergencies



Wind Power Generation Trainer Hardware Pictures











Wind Power Generation Trainer Software Screenshots









