

WIND TURBINE SYSTEM COMPLETE SET

Model Number : DDC-WTS-15M



Description

This unit is specially developed for use in electrical teaching laboratory for the purpose of demonstrating the basic concept and the operating principle of Wind turbine system . Enables the 600 watt land turbine to achieve its highest possible performance by periodically tracking the maximum power point of the turbine's output

TECHNICAL SPECIFICATION :		
<p>WIND GENERATOR</p> <ul style="list-style-type: none"> ❖ 200-400 watt rated power ❖ 3 composite material blades ❖ Nominal 12V/24V DC for standard output ❖ Rated Current 25N12.5A ❖ Rated Rotate Speed 1400-2500 r/min ❖ Power: 300-450W ❖ 3 blades ❖ Start-up wind speed: 1.5-Sm/s ❖ Rated wind speed : 5-15 mis ❖ Rotor Diameter: 800-1500 mm ❖ Blade material: Carbon fiber ❖ Output anti-winding device: Overall 3 phase commutator ❖ Generator : 3 Phase AC Synchronous ❖ Generator Case: Aluminum Alloy and/or Plastic coating 	<p>DC/AC INVERTER</p> <ul style="list-style-type: none"> ❖ Continuous Power: 500 -1,500W ❖ Surge Power: 1,000- 2,500W ❖ Output Voltage : 220-240 VAC ❖ Input Voltage Range: DC 11V to 15V ❖ Over Voltage Shutdown : Over DC 15V ❖ Under Voltage Shutdown below DC 11V ❖ Output Wave Form : Modify Sine Wave ❖ Frequency : 50/60Hz ❖ Over Load Shutdown : Yes ❖ Thermal Shutdown : Yes ❖ Short Circuit Shutdown : Yes ❖ Efficiency : Up to 90% ❖ Total Harmonic Distortion : <5% ❖ No Load Current Draw : <0.6A 	<p>AC VFD Drive</p> <ul style="list-style-type: none"> ❖ Input 1 P AC 220-240 V Variable Frequency Drive unit. Output 3P AC 220-240 V ❖ Power: 0.5 - 1.5 Kw <p>BLOWER FAN</p> <ul style="list-style-type: none"> ❖ Air flow rate: 20,000 to 50,000 cfm ❖ 3 Phase AC motor drive <p>BATTERY MODULE</p> <ul style="list-style-type: none"> ❖ Nominal voltage: 12V (6 cells) ❖ Nominal capacity: 100.0 AH

OPTIONAL FUNCTION :

- The unit includes data acquisition board interface to PC and measurement of voltage and current converters. Calculating wind energy conversion efficiency, visualize the trend of the wind speed and the energy flows to and from battery, inverter and wind power generator,
- drawer the wind power generator characteristic curve output power vs wind speed .
- Equip with PLC module, Digital ammeter, digital voltmeter, power meter, emergency button, start and stop button, indicator pilot lights etc.,

Manuals:

- (1) All manuals are written in English
- (2) Model Answer
- (3) Teaching Manuals

General Terms:

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

Warranty:

2 Years

* Proposed design only, subject to changes without any notice.