

### **EEA1 Series**

## 500W Wind/Solar Hybrid Controller Off-grid



#### **Product Features:**

- ◆ The product can be manufactured in accordance with either JB/T6939.1-2004 industrial standard, GB/T 19115.1-2003 national standard or users' technical requirements.
- ◆ EEA1 controllers adopt three-phase dump load control.

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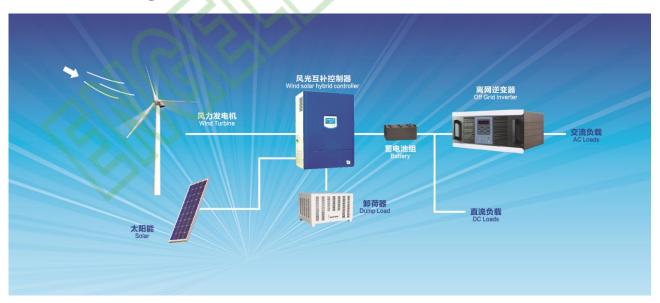
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### Wind/Solar Hybrid Controller EEA1 500W Technical Datasheet

- ◆ The total power of three-phase dump load is 200% larger than the rated power of the wind turbine. Ensure safe operation of the overall wind turbine system.
- ◆ When the batteries group damaged or be disjointed, the three-phase dump load will automatically start to avoid the idle run of the wind turbine and the occurrence of runaway accident.
- ◆ It has reverse connection, anti-decoupling and damage-resisting protection of the battery.
- ◆ Over-charging protection of the battery: When the battery is full (the battery pressure reaching 125% of the rated pressure), the controller will automatically carry out three-phase dump load to stop charging the battery.
- ◆ Auto recovery of battery charging: When the battery pressure reduces to 108% of the rated pressure, the dump load will stop three-phase dump load to automatically recover battery charging.
- ◆ For the different wind turbine type, the controller can be equipped with mechanical yawing, furled empennage, mechanical or hydraulic, pneumatic, electric magnetic and other brake functions.
- ◆ The controller is equipped with manual three-phase dump load switch. To using this switch, the wind turbine will carry out three-phase dump load forcibly.

#### **Connection Diagram:**





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#### **Technical Parameters**

Туре	500W-12Vdc	500W-24Vdc
Wind turbine rated power	500W	500W
Wind turbine max. power	1KW	1KW
Solar panel power	200W	200W
Battery	12Vdc	24Vdc
Function	Rectifier, charge, control	
Wind turbine 3-phase dump load voltage	14.5±1Vdc	29±1Vdc
Wind turbine 3-phase brake voltage	15±1Vdc	30±1Vdc
Wind turbine Recovery charging voltage	13.5±1Vdc	27±1Vdc
Solar controller stop charging voltage	15±1Vdc	30±1Vdc
Solar restore charge voltage	13.5±1Vdc	27±1Vdc
Low-voltage of the battery	10±1Vdc	20±1Vdc
Self-provided connecting wire of the battery	>10mm²	>4mm²
Work environment temperature	-30-60°C	
Relative humidity	<90% No condensation	
Noise (1m)	<40dB	
Degree of protection	IP20 (Indoor)	
Cooling method	Forced air cooling	
Size of the controller (mm)	450*360*270mm	
Weight of the controller	9kg	
Size of the dump load (mm)	360*300*270mm	
Weight of the dump load	5kg	

<sup>\*</sup>Above parameter only for reference only. Could be custom made to user specifications.





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