





## Performance

- Design for off-grid wind/solar hybrid power system.
- Integrated design of wind controller and solar controller.
- Applicable to different kinds of batteries .
- PWM step-less unload mode, which burn the excess power into dump load, making the battery charging in best status.
- Digital intelligent control, With powerful imported MCU control as the core device .To ensure Simple peripheral circuit structure, And more flexible and powerful control method and control strategy .
- Modular design with simple structure and easy maintenance.
  - LCD display function, visually display wind power, wind voltage, wind current, wind turbine speed, PV power, PV voltage, PV current, battery voltage, battery power, charge current.
- Perfect protection function: Solar reverse charge protection, Solar reverse connection protection, Battery overcharge protection,

  Battery over current protection, Battery reverse connection protection, Open battery protection, Wind turbine automatic brake and manual brake, thus the system has higher reliability.

## **Optional Functions**

- Optional temperature compensation function.
- Optional Boost function.
- Optional Buck Function.
- Optional Buck & Boost Function.
- Optional RS232/RS485 to communicate with computer or USB data logging automatically .
- Optional Temperature Compensation Function



## Parameters & Price

Item No.	TGWS10-48
Rated Wind Power(W)	1kW
Maximum Wind Power(W)	1.5kW
Rated Solar Charge Current (A)	10A
Rated Battery Voltage(V)	48V
Over-discharge Voltage	40.8V(adjustable)
Over-discharge Recovery Voltage	46.5V(adjustable)
Over-charge Voltage	58.8V(adjustable)
Over-charge Recovery Voltage	52.8V(adjustable)
Floating Voltage	54.0V(adjustable)
Dump-load Start Voltage	100V(adjustable)
Dump-load Start Rotate Speed	500RPM(adjustable)
Wind Turbine Charging Voltage	20V(adjustable)
Wind Turbine Charging Mode	MPPT and PWM
Solar Charging Mode	PWM
Display Mode	LCD
Display Parameters	wind power , wind voltage , wind current , wind turbine speed ,PV power ,  PV voltage , PV current , battery voltage , battery power ,charge current
Cooling	By fan
Range Of Working Temperature	-20~+55℃ (no condensing )
Range Of Working Humidity	35~90% (no condensing)
Protection Type	Solar reverse charge protection, Solar reverse connection protection, Battery overcharge protection, Battery over current protection, Battery reverse connection protection, Open battery protection, Wind turbine automatic brake and manual brake