

Wind /solar hybrid controller with inverter

---Intelligent pure sine wave



## Product introduction:

This product is aimed at grassland, pastoral areas, desert, mountains, frontier sentry, islands and other areas without electricity or power shortage of solar power system design and production. These places with poor environment, traffic inconvenience, communication inconvenience and other characteristics, so the products developed by the latest generation of embedded technology, M4 (fourth generation ARM 32 processor) as the main control chip, to complete the whole system control, charge and inverter circuit and control system, this product contains battery management system (BMS), the solar protection system (SPS), wind power generator protection system (WSPS) and dump load system, the overheat protection system (OPS), short circuit, lightning protection and AC output overload, overvoltage and other intelligent protection function, protection function with intelligent recovery system (IRS). In order to ensure the high stability and high reliability of the product, we have done a lot of aging tests, providing adequate technical guarantee for the normal use of the equipment in different environments.

## Product Feather:

- ★ Core components are internationally renowned brands to ensure high reliability of equipment.
- ★ Battery reverse connection protected (different from current market fuse protection, **new technique**)
- ★ Full protection, intelligent recovery
- ★ Power frequency ring isolation transformer, more less loss, higher efficiency
- ★ Modular design is convenient for later system expansion
- ★ Digital display of the main parameters, display more clearly, more intuitive
- ★ Pure sine wave output, with stronger carrying capacity, wider scope of application

## Application Areas:

- ★ Stand alone solar and wind hybrid power system
- ★ Stand alone domestic household wind/solar hybrid power system
- ★ GSM base stations, expressway and other no-residential regions
- ★ Coastal islands, remote mountainous, border posts for regions shortage of or without electricity.
- ★ Government demonstration projects, landscape lighting project, street light project etc.

## Optional function:

- ★ Mains switch module
- ★ RS232/485 communication module

- ★ GPRSdata transmission module
- ★ Solar-Wind-Diesel generation module

### Warm Prompts:

Customers, who will order the wind/solar hybrid street light controllers, need to provide the following information:

- ♣ Rated battery voltage
- ♣ Rated solar power
- ♣ Rated wind turbine power
- ♣ Whether the wind turbine is three phase AC output, single phase DC output or single phase AC output.
- ♣ Whether output is single phase or three single phase
- ♣ Rated output capacity: rated output voltage, rated output frequency of the inverter.
- ♣ The load characteristic: Resistive load or Inductive load.
- ♣ With or without by-pass function: Customers should provide rated voltage and frequency of AC input if they need it.

### Technical Parameters :

Model		DWSCI503-48-L2205S	DWSCI503-96-L2205S
Physical parameter	Standard power	4KW/5KW/6KW	
	Net size	600*600*180mm	
	Weight	About 85kg	
	Packing	One :carton/wooden case,batch:carton + wooden pallets	
Electrical parameter	Rated battery voltage	DC48V	DC96V
	Rated solar power	3KWp	3KWp
	Rated wind power	2KW	2KW
	Dump load power:wind power	2:1	2:1
	Over-charge protection voltage	58V	116V
	Over-discharge protection voltage	42V	84V
	Battery reverse	Electronic	

connection protected type		
Control type	SPWM	
AC output voltage	110/120/220/230/240V <sub>AC</sub> ±5%	
Frequency	50/60Hz ±5%	
Efficiency	≤93%	
Wave	Pure sine wave	
THD	≤3%(Linear load)	
topology structure	H Bridge	
Voltage regulation	±2%	
Load regulation	±4%	
Cooling method	forced cooling	
Display	Digital display	
No-load loss	0.6A	
Noise	45dB (1m)	
Insulation resistance	20MΩ	
Dielectric strength	AC1500V, 1min No breakdown	
Load level	100%	Continuity
	125%	1min
	150%	10s
Protection function	Battery reverse connection protection, solar reverse connection protection, over / under voltage protection, short circuit protection, over-current protection, overload protection, overheat protection, lightning protection	
Working environment temperature	-10°C-50°C	
Storage ambient temperature	≤90%,No condensation	
Use time	Long-term	

**In order to serve our customers better. Our company can adjust parameters configuration according to customer's requirement.**

**Declare: The product has applied for patent protection, counterfeiting will be subject to legal sanctions. Our company reserves the right to change products .Design and specification are subject to change without prior notice.**