MPPT Wind Controller

Machine
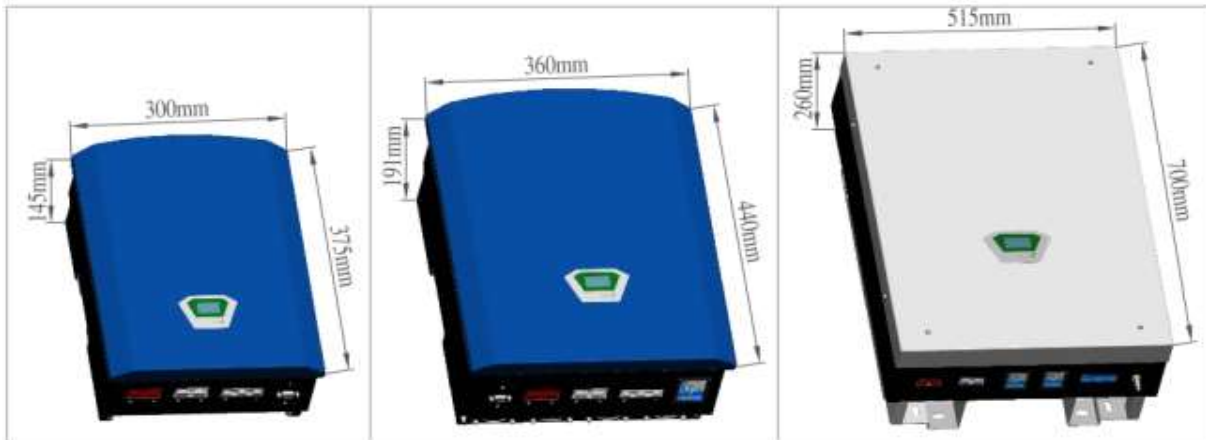
1-3kW	5-10kW	20-30kW

Dump Load

1 kW	2 kW	3 kW	5 kW	10 kW	20 kW	30 kW

Applications

- Independent wind power plant
- Independent household wind power generation system
- Power supply for those unmanned regions like mobile communication station, high way, the coastal islands, remote mountainous regions and border posts.
- Regional research projects, government demonstration projects, landscape lighting projects for those places with insufficient power or power shortages.

Features

- Can be applied to grid-tied system, off-grid system and grid-tied energy storage system.
- Several functions are optional, such as PV control function, wind speed measure function, rotational speed control function and temperature compensation function.
- RS232/RS485/RJ45/GPRS/Bluetooth/Zigbee optional.

- MPPT power curve settable
- Complete protection function
- Standard MODBUS protocol optional

Technical Parameters

2kW

Model	GW20-48-48	GW20-48-240
Type	Boost	Buck
Wind Turbine Input		
Rated input power	2kW	
Rated input voltage	56Vdc	280Vdc
Input voltage range	0~64Vdc	0~320Vdc
Start charge voltage	12Vdc (factory default,8Vdc~64Vdc settable)	60Vdc (factory default,40Vdc~320Vdc settable)
Rated input current	42Adc	9Adc
Brake by hand	Keep press the button for 5s to unload completely, and then recover by hand.	
	Switch "ON" the brake switch	
Brake by over current	50A (factory default,0~50A settable)Unload completely when reached the set current, and recover automatically after working 10mins.	10Adc (factory default,0~10A settable)Unload completely when reached the set current, and recover automatically after working 10mins.
Brake by overvoltage	Refer to "output overvoltage" control	320Vdc (factory default,220Vdc~320Vdc settable)PWM unload step by step once reached the set unload voltage, and it will unload completely if the voltage rise 20Vdc more.
Brake by over wind speed (optional)	18m/s (0-30m/s settable), unload completely when reached the set wind speed, and recover automatically after 10mins (and the speed should be less than 15m/s.)	
Brake by over rotational Speed (optional)	500r/min (factory default,0~1000r/min settable)Unload completely when reached the set rotational speed, and recover automatically after working 10mins.	
Charge Parameters (optional)		
Rated battery voltage	48Vdc	
Temperature compensation function (optional)	-3mV/℃/2V	
Output Parameters		
Rated output voltage	48Vdc	
Start unload voltage	56Vdc (factory default,44Vdc~64Vdc settable)	

Complete unload voltage	60Vdc (factory default, add 4V to the start unload voltage)
Max. Output current	42Adc
General Parameters	
Rectifier mode	Uncontrolled rectifier
Display mode	LCD
Display information	DC output voltage, wind turbine voltage/current/power. For those with charge control function, Battery voltage is showed as well.
Monitoring mode (optional)	RS232/RS485/RJ45/GPRS/Bluetooth/Zigbee
Monitoring Contents	Real-time display: DC output voltage, wind turbine voltage/current/power. For those with charge control function, Battery voltage is showed as well.
	Parameter setting: Output overvoltage point, wind turbine over current point, wind turbine start voltage, and wind turbine manual brake button.
Lightning protection	YES
Conversion efficiency	≥92%
Static loss	＜5W
Ambient temperature	-20℃～+40℃
Humidity	≤90%, No condensing
Noise	≤65dB
Cooling mode	Natural cooling
Installation mode	Wall-mounted
Cover protection class	IP42
Product dimension (W*H*D)	300×375×145mm
Product net weight	10kg
Dump load dimension (W*H*D)	300*400*210 mm
Dump load net weight	9kg
Note: the listed specs are just for your reference	