

二、 technical data

2.1、 HY-3KW wind generator

Item	Parameters
Start up (m/s)	2
Rated wind speed (m/s)	12.5
Cut-in speed (m/s)	3
Rated voltage (DCV)	48
Rated power (W)	3000
Max power (W)	3254
Rotor diameter (m)	3.1
blade (pc)	5
Over-speed protection	Blade over-speed and electromagnetic braking
Over-loader protection	Electromagnetic braking

2.2、 3kw wind generator on-grid inverter WG3K

Continuous over loading capacity	110%
Transient over loading capacity	130%, 20 seconds
DC input voltage	230V ~ 400 V
Rated AC output power	3KW
Total current Harmonic distortion(THD)	<3 %
Power factor	>0.99
Peak efficiency	95 %
European Efficiency	93 %
Allowed power line voltage (single phase)	180 V-260V AC(can set)
Allowed power line frequency	47-52 Hz /57-62Hz(can set)
noise	<40dB
Protection scale	IP65
cooling	Natural cooling
Communication interface	RS485/Ethernet/GPRS
Working temperature	- 20°C ~ + 40°C
size (w×h×L)	490 x385 x177 mm
weight	44kg

Notes:

1. Using together with WEL-4K, it is a complete solution of on-grid generation system.
2. High system efficiency using 5th generation of IPM module.
3. MPPT auto-optimization technology greatly increases the output;
4. multi languages LED show function can set freely;
5. humanization interface can set all function parameters by keys;
6. many kinds of communication interfaces available, it is easy for monitoring;
7. perfect protection functions make the system with high reliability;
8. wide in DC input voltage;
9. can freely set POWER CURVE
10. with direct insertion anti-water terminal;
11. CE approval;

2.3、 WEL electronic load controlling box WEL-4K

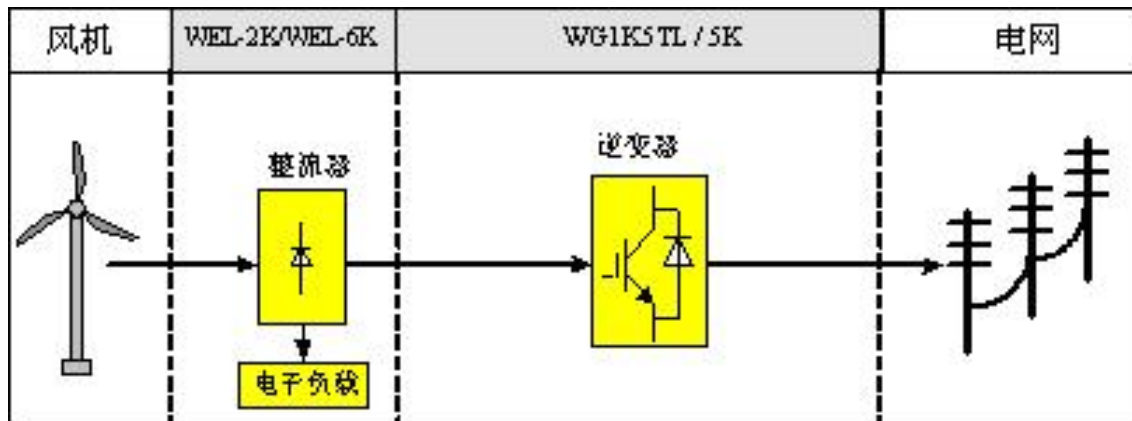
type	WEL-4K
3 phase AC input voltage	0V-320V
DC output voltage	0V-480V
Max power of dump loader	4KW
Working mode of dump loader	Power UNCAL (0- 4KW)
Dump loader voltage-stabilizing	230V-380V
size (w×h×L)	348 x580x248 mm
Weight	25kgs
Anti-water grade	IP20
Working temperature	-20°C - 40°C
Mode of heat yield	By fan

Notes:

WEL-4K have three main functions:

1. to make 3 phase AC rectifying to DC and input it into the later inverter;
2. According to the inner controlling single, to connect with the UNCAL dump loader(max 4kw) to discharge more power and protect the system without stopping system, when the output is too big;
3. when emergency or maintenance, pressing the hand-braking button to make the 3 phase output of the wind generator short-circuit, to stop the wind generator and protect the whole system.

三、system Mechanism diagram



System equipment photos

3.1、HY-3KW wind generator photo



3.2、 3kw on-grid inverter photo



3.3、 WEL electronic load controlling box photo

