

## Permanent Magnet Generator

“E-iF PMG” permanent magnet generator has excitation field provided by permanent magnet instead of coil as DC supply, without slip ring and brush. It is major source of electric energy, used to convert mechanic power out of steam turbine, gas turbine, hydro turbine, wind turbines, etc. It's mostly made rotor internal and stator external; rotor external and stator internal and coreless Permanent Magnet Generator can also be customized.

### Inner Rotor Permanent Magnet Generator Technical Specification

3 phase, direct driven, brushless, inner rotor Permanent Magnet Generator

Mounting Type: Horizontal/Vertical

#### Composition:

Inner Rotor	Permanent Magnet NbFeB
	Axis
Outer Stator	Copper Coil
	Yoke
	Slot
	Tooth
	Insulation Section
Insulation Grade	F
Generator Configuration	Star Connection, 3 phase AC output

#### About Material

Shaft Material	Carbon Round Steel with quenching and tempering Treatment
Shell Material	Casting
Winding Temperature Class	150℃
Permanent Magnet Material	Rare Earth NdFeB
Permanent Magnet Material Temperature Class	150℃
Core	High Grade Cold Rolling Silicon Sheet
Protection Grade	IP54

#### Main Specification Sheet

Model No	Rated Power Range	Rated Speed
PM-IR-300W~100KW	300W~100KW	400/300//200/100rpm
PM-IR-100KW~500KW	100KW~500KW	100/80/60/50rpm
PM-IR-1MW	1MW	200rpm
PM-IR-1.5MW	1.5MW	200rpm
PM-IR-2MW	2M	200rpm
PM-IR-3.6MW	3.6MW	350rpm

\*\*\*Rated Speed and Rated Voltage at different Rated Power can be customized. \*\*\*

## PRODUCT RANGE IN MULTI-ENERGY



2KW100rpm



7KW200rpm



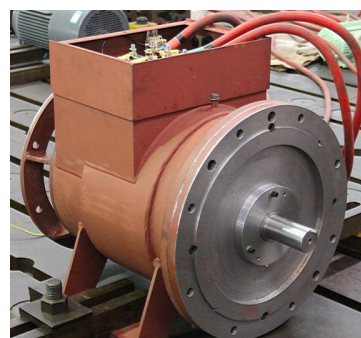
10KW55rpm



20KW200rpm



50KW75rpm



100KW3000rpm for cogeneration



1.5MW Double Feed Generator



1.5MW17.4rpm PMG



2MW15.75rpm PMG



3.6MW350rpm PMG

## Micro Grid System

Micro Grid System is composed of micro power, storage system, control devices and load. It is separate unit from grid, with functions on self-control, self-protection and self-management; It can operate separately and can also be grid-connected; It can be a power supply or a load to outer grid.

### Micro Power

It includes solar power, wind turbine and other types of fluctuated and discontinuous renewable energies. Most are small capacity distributed energy.

### Storage System

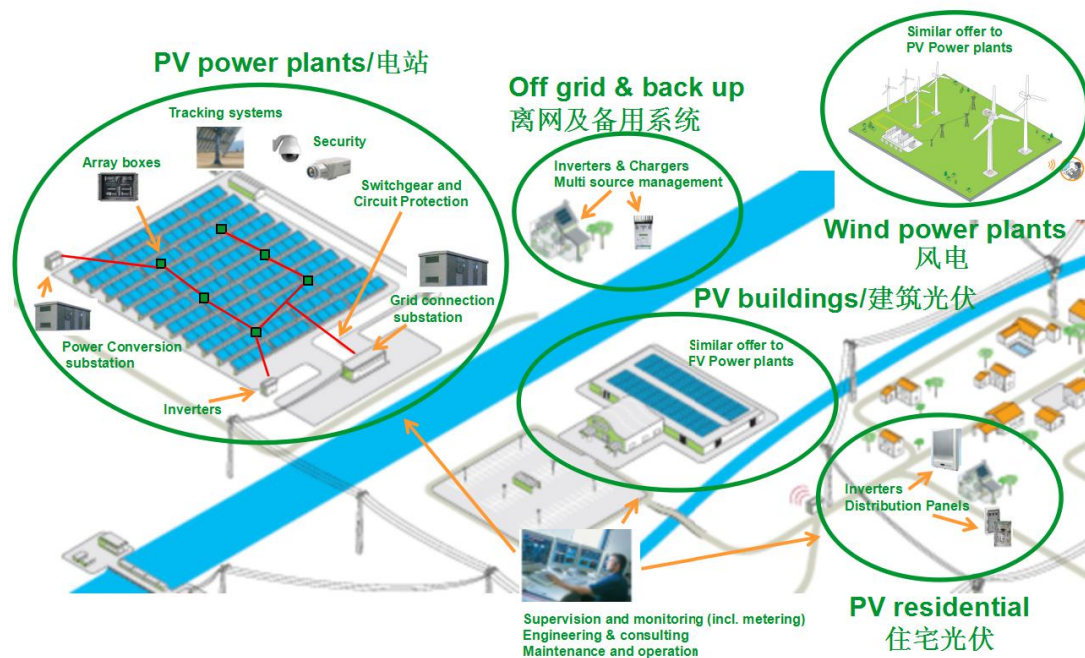
Divided into Energy Type (such as, lead acid battery, Lithium battery and liquid flow battery) who improves utilization efficiency of renewable energy and Power Type (such as, flywheel, super capacitor) who ensures stability at accidents of micro grid connecting to grid/disconnecting, power supply or load switching operation.

### Control Devices

Control devices are the hardware and software equipment to make sure micro grid system operates stably, provide relay protection, dispatch, etc.

### Load

Divided into Critical load and secondary load; intelligent load, adjustable and non-adjustable load.



**Core Business with Products & Services of Micro Grid System**

- 1, Develop, manufacture and sell Multi-in-one Power System: small capacity wind turbine (horizontal: 1-300KW; vertical: 1-10KW), solar power system, storage system, control device;
- 2, Develop, OEM manufacture and sell big capacity Control System;
- 3, Develop and sell control system software;
- 4, Consultant, design, and management for projects on Micro Grid System and Hybrid Power Plant.

