

# Wind Turbine Permanent Magnet Generator/ Alternator

## Ginlong Technologies GL-PMG-500A

World Leading Professional Wind Turbine Parts Supplier

### Electrical Specification

|                                                |                                  |
|------------------------------------------------|----------------------------------|
| Rated Output Power(W):                         | 500                              |
| Rated Rotation Speed (RPM):                    | 450                              |
| Recified DC Current at Rated Output (A):       | 20                               |
| Required Torque at Rated Power(NM):            | 14.8                             |
| Phase Resistance (Ohms):                       | 0.66                             |
| Output Wire Square Section (mm <sup>2</sup> ): | 6                                |
| Output Wire Length (mm):                       | 600                              |
| Insulation:                                    | H Class                          |
| Generator configuration:                       | 3 Phase star connected AC output |
| Design Lifetime:                               | >20 years                        |

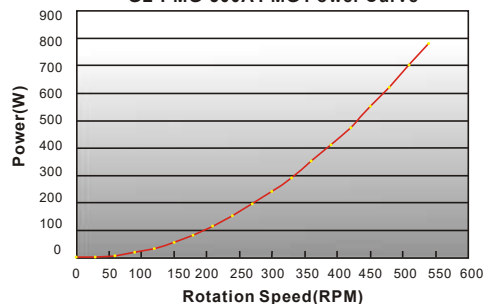
### Mechanical Specification

|                                     |                                                         |
|-------------------------------------|---------------------------------------------------------|
| Weight (Kgs):                       | 14.4                                                    |
| Starting Torque (NM):               | ≤0.45                                                   |
| Rotor Inertia (Kg.m <sup>2</sup> ): | 0.006                                                   |
| Bearing Type:                       | High standard NSK 6207DDUC3 (Front) NSK 6207VVC3 (Rear) |

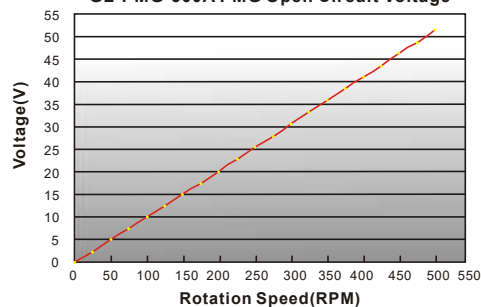
### Material Specification

|                                                                                                                                                                                                                                          |                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Shaft Material:                                                                                                                                                                                                                          | High standard Stainless Steel                           |
| Shaft Bearing:                                                                                                                                                                                                                           | High standard SKF or NSK bearing                        |
| Outer Frame Material:                                                                                                                                                                                                                    | High standard Aluminium alloy with TF/T6 heat treatment |
| (TF/T6 full heat treatment for increasing the performance of aluminium alloy as follows. Heat 4-12 hours at 525-545 degrees Celsius, quench with hot water, and precipitation heat treatment for 8-12 hours at 155-175 degrees Celsius.) |                                                         |
| Fasteners (nuts and bolts):                                                                                                                                                                                                              | High standard Stainless Steel                           |
| Windings Temperature Rating:                                                                                                                                                                                                             | 180 degrees Celsius                                     |
| Magnet Material:                                                                                                                                                                                                                         | NdFeB (Neodymium Iron Boron)                            |
| Magnets Temperature Rating:                                                                                                                                                                                                              | 150 degrees Celsius                                     |
| Lamination Stack:                                                                                                                                                                                                                        | High specification cold-rolled Steel                    |

GL-PMG-500A PMG Power Curve



GL-PMG-500A PMG Open Circuit Voltage



GL-PMG-500A PMG Input Torque Curve

