

S&G Engineering

The Wind Turbine Technology Provider

We herewith present our newest wind turbine designs for technology transfer

- S-Class: 50 -100 kW (Direct Drive – PM Generator)
- M-Class: 500-750 kW (Gearbox and PM Generator)
- L-Class: 1700 kW (Gearbox and PM Generator)
- XL-Class : 2500-3000 kW (Direct Drive – PM Generator)

All turbines are designed according to the valid international standards (IEC, GL), long term tested and proven in the field

S&G is the technology provider with the broadest range of wind turbine technologies from 50 kW to 3 MW

ALL DESIGNS ARE AVAILABLE FOR LICENSING

Contact us

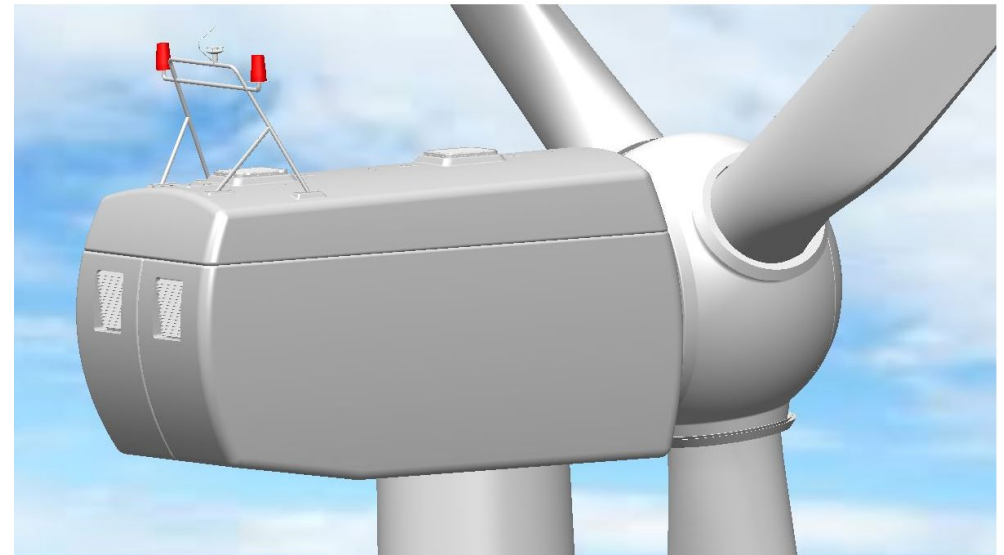
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Product Family: 500-750kW



M-Class

SG500.50

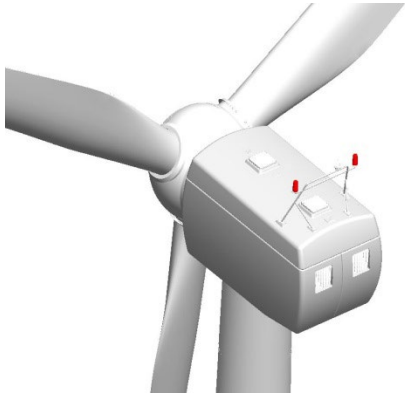
SG500.54

SG750.50

SG750.54

SG750.66

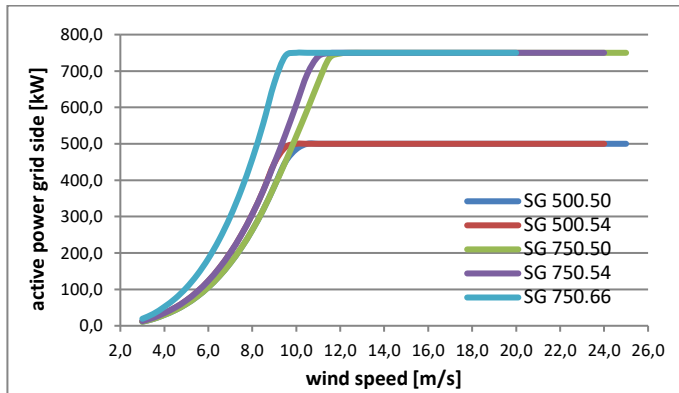
www.sg-engineering.com



The advantages

- permanent magnet synchronous generator
- intelligent power converter
- excellent grid connection
- well-proven drive train concept (integrated gearbox)
- easy assembling and erection
- high availability
- wind class IEC IIA, IEC IIIA and SA 6.5
- 500kW and 750kW version

The well-proven drive train concept (integrated gearbox) allows an economic design, an easy installation and high reliability throughout the lifecycle. The turbines of the 500kW/750kW platform are available for different wind speeds: IEC IIA / IIIA and SA 6.5. The turbine is designed for an operational temperature range of -10°C to 45°C. The available rotor diameters in combination with the varying hub heights and the extended power range enable a best-fit solution for every site.



Power curves of all variants



Power

500kW

750kW

General data

Turbine	SG500.50	SG500.54	SG750.50	SG750.54	SG750.66
Wind class	IEC IIA	IEC IIIA	IEC IIA	IEC IIIA	SA 6.5
Grid frequency	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz
Rotor diameter	50m	54m	50m	54m	66m
Hub height (HH)	50m / 73m	50m / 73m	73m	73m	73m

Operating data

Average wind speed	8.5m/s	7.5m/s	8.5m/s	7.5m/s	6.5m/s
Cut-in wind speed	4m/s	3.5m/s	4m/s	3.5m/s	3m/s
Rated wind speed	11m/s	10m/s	11m/s	10m/s	9m/s
Cut-out wind speed	25m/s	24m/s	25m/s	24m/s	20m/s
Temp. range (operation)	-10°C to +45°C		-10°C to +45°C		
Temp. range (survival)	-20°C to +50°C		-20°C to +50°C		

Tower

Type tubular steel tower

Machinery

Drive train 3-stage gear box with coupling
 Pitch system planetary gearbox with AC servo motors
 Yaw system friction bearing with motor brake

Electric

Generator fast speed synchronous, air-cooled
 Converter full 4-quadrant, water-cooled

Variants of 500kW/750kW platform