



SG 2.2-122

Greater capacity factor in low-wind sites



Minimum power density and high efficiency for a reduced LCoE

SG 2.2-122: optimized for low-wind low-turbulence conditions

Siemens Gamesa,
your trusted
technology
partner

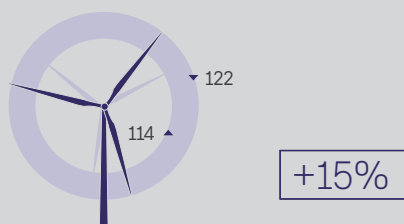
One of the key aspects to Siemens Gamesa's success is the continuous development of new and advanced products adapted to the business case of every customer. We strive to provide the best technological solutions for each project, while driving down the LCoE.

For this reason, we offer an optimized, streamlined catalog of proven solutions

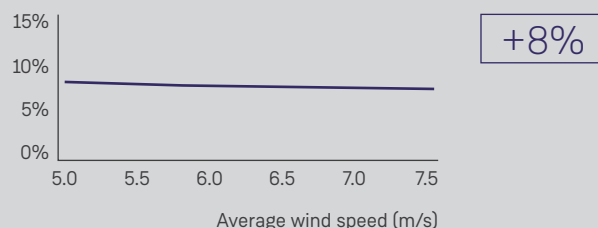
adapted to every type of site and condition, backed by:

- Our reputation as a trusted and stable partner (110 GW installed worldwide).
- A proven track record spanning more than 40 years that makes Siemens Gamesa a benchmark for wind projects.
- The recognition of the wind power sector.

Swept area increase



AEP increase SG 2.2-122 vs. SG 2.1-114



One of the greatest capacity factors in low-wind sites

The SG 2.2-122 wind turbine is one of the latest additions to the Siemens Gamesa 2.X product platform, a benchmark in the wind power sector thanks to its excellent capacity factor and high profitability. Specifically optimized for low-wind low-turbulence conditions, this model seeks competitive positioning in markets with locations of this type, such as China and India.

Boasting a 122-meter rotor combined with a 2.2 MW generator, this new turbine will address our customers' needs at Class S sites thanks to its extremely low power density and reduced Levelized Cost of Energy.

Proven Siemens Gamesa technology

The knowledge acquired through our latest products, specifically in the optimization of design, prototyping, validation and industrialization processes, has been a key factor in the development of the SG 2.2-122 wind turbine.

SG 2.2-122 has a 60-meter blade. This is a new development from the 56-meter variant extensively validated in Siemens Gamesa projects involving wind turbines with a 114-meter rotor, through which we have achieved maximum production combined with reduced noise emission levels. In addition, the electrical system that it incorporates is also common to all other solutions with 2.1 MW of nominal power.

Versatility and extensive experience

With over 8% increase in energy production compared to the SG 2.1-114 model, the SG 2.2-122 turbine completes the Siemens Gamesa range in the 2 to 3 MW segment for low-wind sites.

Endorsed by its reliability, with an average fleet availability greater than 98%, and by its extensive experience, Siemens Gamesa 2.X stands out for its versatility and maximum performance at all locations and in all wind conditions. Its range of rotors and tower heights (63-153 meters) combined with different environmental options creates an excellent proposal for harvesting maximum energy from the wind with the greatest efficiency.

Technical specifications

General details	
Rated power	2.2 MW
Wind class	IEC III/S
Control	Pitch and variable speed
Standard operating temperature	Range from 0°C to 40°C ⁽¹⁾
Rotor	
Diameter	122 m
Swept area	11,690 m ²
Power density	188.19 W/m ²
Blades	
Length	60 m
Airfoils	Siemens Gamesa
Material	Fiberglass reinforced with epoxy or polyester resin
Tower	
Type	Multiple technologies available
Height	108, 127 m and site-specific
Gearbox	
Type	3 stages
Generator	
Type	Doubly-fed induction machine
Voltage	690 V AC
Frequency	50 Hz/60 Hz
Protection class	IP 54
Power factor	0.95 CAP-0.95 IND throughout the power range ⁽²⁾

⁽¹⁾ Different versions and optional kits are available to adapt machinery to high or low temperatures and saline or dusty environments.

⁽²⁾ Power factor at generator output terminals, on low voltage side before transformer input terminals.

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