



**Product Description [SPRECO Super Silent 420-Watt](#) Wind Generator of
the 4th Generation**

- New for 2025 -

Spreco Wind Generator Super Silent – 4th Generation

The **Super Silent** Wind Generator of the 4th generation is a consistent evolution of the globally renowned **SPRECO wind generators**. It was specifically developed for the efficient charging of batteries, including modern lithium batteries with BMS systems. SPRECO generators of the first generation have been successfully in use worldwide for over 15 years.

Development Stages of SPRECO Wind Generators:

- **1st Generation:** Spreco 400W
- **2nd Generation:** Silentwind 420W
- **3rd Generation:** Silent Shark 450W
- **4th Generation:** Super Silent 420W

Development Location: Germany

A standout feature of the **Super Silent** Wind Generator is the use of handmade **carbon rotors**. These rotors are not only exceptionally durable and resistant to all wind speeds, but also feature an aerodynamic design that makes the generator the quietest on the market.

The rotors were tested in the wind tunnel at up to 5000 RPM, with the blade tips reaching the speed of sound.



Additionally, **SPRECO generators** are equipped with a **patented strong wind brake**, allowing for autonomous operation and making the generators some of the safest on the market. The strong wind brake is directly integrated into the housing and operates via a bimetallic switch. When the temperature reaches 140°C, the brake is activated, short-circuiting the three windings of the generator through a three-phase rectifier (100 amperes), triggering the induction brake. After the windings cool down, the generator is automatically restarted.

This patented brake not only protects against overheating but also prevents the performance loss of **permanent magnets**, which could be damaged by excessively high temperatures. The maximum **Curie temperature** of permanent magnets is 340°C – temperatures above this can destroy them. By shutting off in time, the maximum performance is permanently ensured, which other generators lose over time due to overheating magnets.

New in this generation is the intelligent controller with state-of-the-art control technology. A standard WiFi monitoring system allows for remote monitoring of the system. The battery charge is secured by a load resistor, which dissipates excess energy, ensuring stable and safe charging.

All modern lithium batteries have their own safety system (BMS), which disconnects the battery from the charger in case of a malfunction. This causes a defect in conventional charge controllers. The missing load is then absorbed by our load resistor in our charge controller.

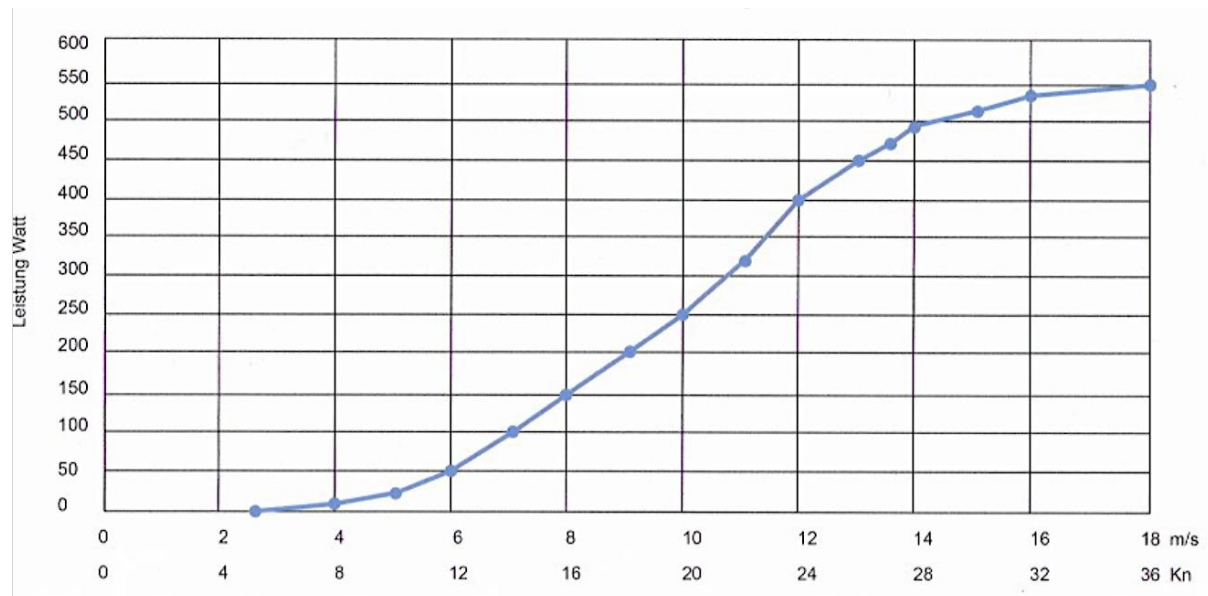
With the **Super Silent** Wind Generator, you are opting for the highest efficiency, safety, and technology – ideal for autonomous operation and use in the most demanding conditions.

Technical Details:

- 420 Watts at optimal wind speed – 12 Volt
- Rotor blades made from high-quality, weather-resistant materials for maximum efficiency. Manufactured by hand with great attention to detail.
- Generator type: Permanent magnet generator
- 3-phase, AC
- Rated voltage: Available in 12 V DC / 24 V DC / 48 V DC (controller with WiFi)
- Controller charges all types of batteries, including Lithium with BMS
- Rated wind speed: 13.0 m/s
- Start-up wind speed: 2.2 m/s
- Charging starts at: 2.5 m/s
- LED charge indicator visible from below
- Integrated patented fully automatic storm brake (new)
- Double bearing generator shaft (new)
- Suitable mast tubes: AD 48mm to 50mm with 2mm wall thickness (stainless steel)
- Shutdown speed: None
- Rotor diameter: 1.15 m
- Number of blades: 3
- Blade weight: ca. 165 g per blade
- Rotors made of carbon fiber - hand-laminated
- Self-centering rotor blade mounting (new)
- Weight: approx. 7 kilograms
- Housing made of aluminum die-casting, color: white
- Two-layer construction, powder-coated
- Converter available for Starlink systems
- Noise dampers for masts available



Performance curve Super Silent 400 with 12 Volt:



Applications:

- Homes or holiday homes (as an additional energy source)
- Boats and yachts
- Off-grid systems in remote areas
- Solar systems for hybrid use in camping and outdoor activities
- With an inverter for off-grid systems and balcony power plants.
- Power supply for **Starlink** systems

