



S&W 7.5

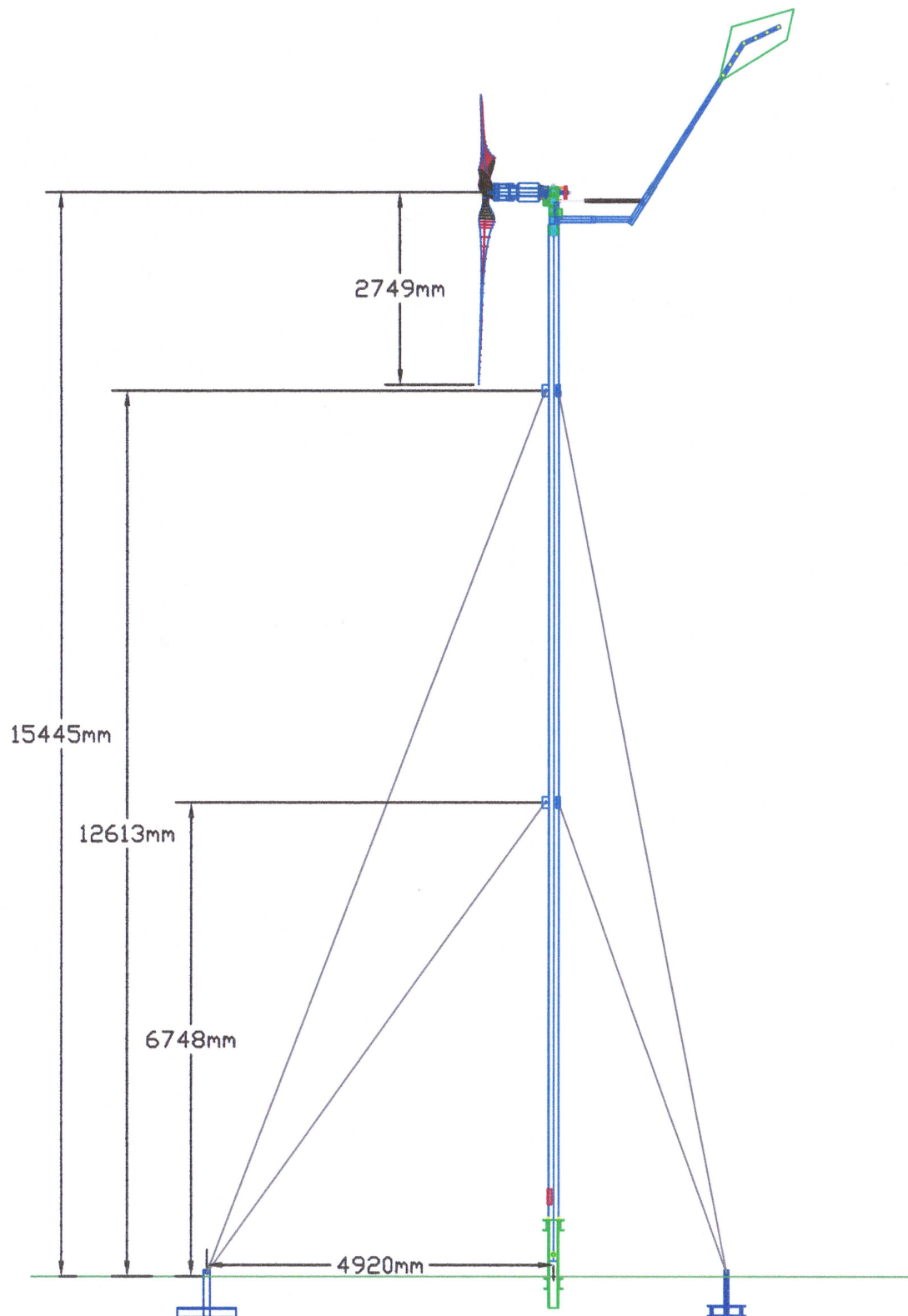
Product information

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Wind energy plant S&W 7.5

Planung und Errichtung von
Solar- und Windenergiesystemen



S & W Energiesysteme
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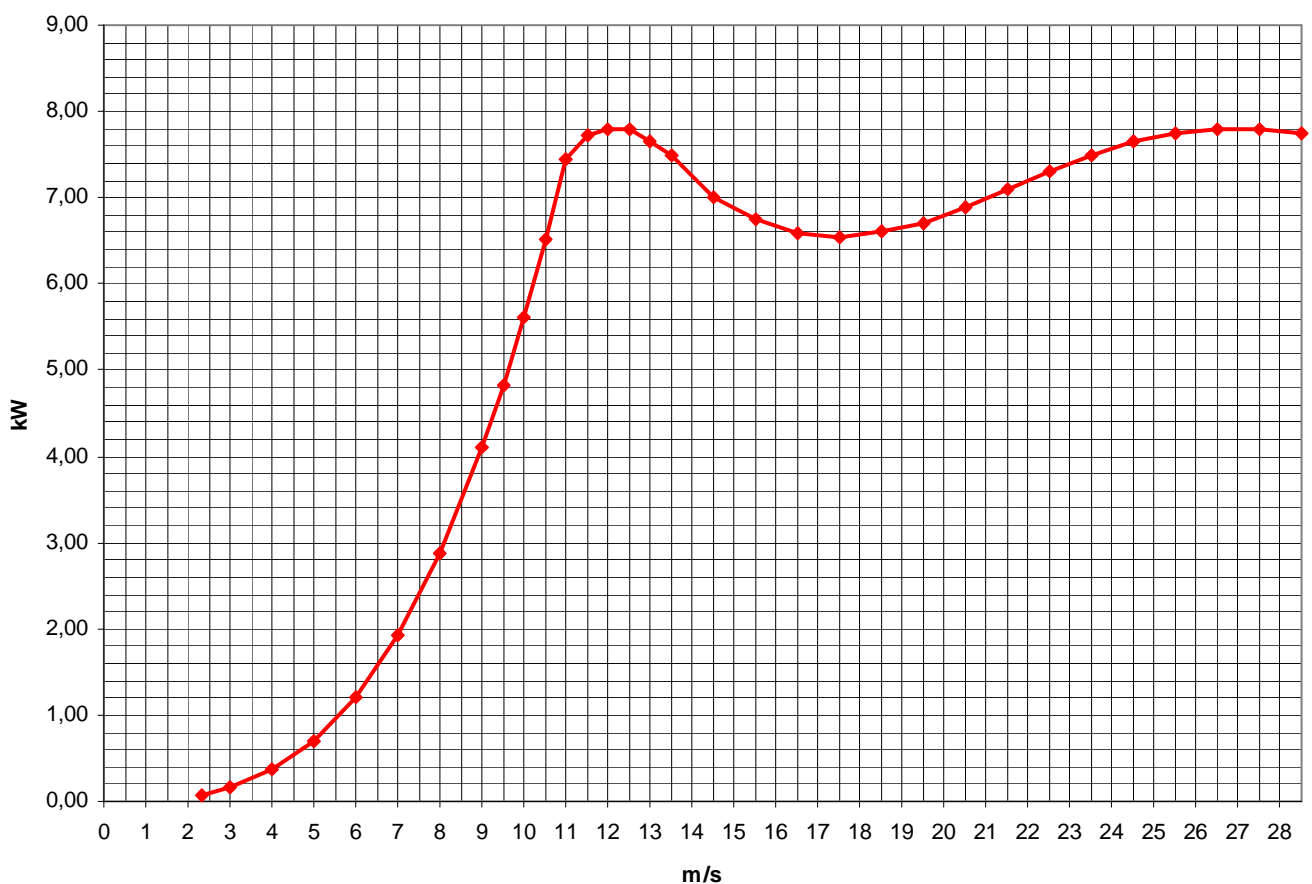
Technical data S&W 7.5

| | |
|-----------------------------------|---|
| Cut in wind speed | 2.5 m/s |
| Nominal wind speed | 11.3 m/s |
| Nominal power: | 7.5 KW |
| Power limitation starts at | 11.3 m/s |
| Rotor diameter | 5.50 m |
| Number of blades | 3 |
| Rotor speed | 120 – 180 rpm |
| Rotor blade material | CFRP |
| Yaw control system: | wind vane |
| Storm protection: | The rotor is swiveled out of the wind laterally / separate overspeed protection TorqueControl system. |
| Generator voltage | 3 phase AC 60 - 500V |
| Frequency converter power rating: | 8 KW |
| Hub height: | 15.4 m spanned in 3 directions and 2 levels (altern. 22 m, 4 d, 2 level) |

In case of power failures the plant is switched off automatically.

S&W wind energy plants are **CE** conforming.

Powercurve S&W 7.5





| | | | | | | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Yearly average wind speed in m/s | 3.6 | 3.8 | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 |
| Yield in thousand kWh per year | 3.8 | 4.5 | 5.3 | 6.1 | 7.0 | 8.0 | 9.1 | 10.3 | 11.6 | 13.0 | 14.5 | 16.1 | 17.8 |

S&W wind energy plants are particularly economical.

The innovative construction does not only allow freedom from maintenance to the greatest possible extent, but also an energy yield which grants a short payback period.

- No sensors or actuators
- Usage of a thermally and mechanically robust and inexpensive asynchronous generator
- Power control with the proven SideFacing system. When the weather is stormy, the wind pressure pushes against the rotor surface and presses it against a spring balancer, out of the wind. This way, the power output is limited to the nominal output. The pressure on the wind energy plant stays almost constant, depending on the spring adjustment.
- Newly developed, extremely robust safety system "TorqueControl"

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S&W wind energy plants are particularly safe.

With their sophisticated safety system, they resist even strong storms - we give you our guarantee for that.

- Dual safety storm protection: "SideFacing " and "TorqueControl"
- The TorqueControl system means that S&W wind energy plants are fail-safe. The safety system "TorqueControl" passively controls the torque of the generator. Whenever overspeed or power failures occur, the plant is switched off immediately as the torque of the generator stops. The rotor goes into the storm position.
- In the storm position, the rotor surface is parallel to the wind direction which means the area exposed to wind is much smaller.