5 kW Pitch Control Wind Turbine

ROCKSOLAR | RS-PCWT-5KW

Three-blade, horizontal-axis wind turbine with mechanical centrifugal pitch control and tail-vane wind alignment.



5 kW
Rated power

5.6 m
Rotor diameter

11 m/s
Rated wind speed

OUTPUT AND WIND CONDITIONS	
Rated output	5 kW at 11 m/s
Rated rotor speed	240 rpm
Start-up / cut-in wind speed	2.5 m/s / 3 m/s
Cut-out wind speed	25 m/s
Extreme wind speed	59.5 m/s
ROTOR GENERATOR AND CONTROL	
Configuration / design class	Horizontal axis, upwind / IEC Class II*
Rotor diameter	5.6 m
Blade material / quantity	Glass fibre reinforced plastic (GFRP) / 3
Generator / insulation	Three-phase AC permanent magnet synchronous / Class F
Speed regulation	Mechanical centrifugal pitch control
Wind direction alignment	Tail vane
High-wind protection	Pitch control and automatic safety protection (ASP)
Shutdown sequence	Pitch control followed by mechanical braking
CONSTRUCTION AND OPERATING ENVIRONMENT	
Operating temperature	-25°C to +50°C
Ingress protection	IP54
Turbine weight	420 kg
Design life	20 years
Colour	White
TOWER REFERENCE CONFIGURATION	
Tower height options	Independent: 8, 12 or 15 m; tilt-up: 8 or 9 m
Tower material	Q355 steel
Tower structure	Tapered polygonal sections with external flange joints
Corrosion protection	Hot-dip galvanizing

Tower, foundation, controller/inverter and grid interface are project-specific. Confirm package contents and Canadian electrical compatibility with ROCKSOLAR. Actual output depends on wind and site conditions.