WhisperSolar 185 WP

- All-purpose solar module
- All-black color scheme
- Premium quality monocrystalline
- Power output range 185WP
- For 12, 24 & 48 VDC
- Mechanical load up to 5400 Pa
- Low weight
- Module efficiency up to 18.88%
- Positive power tolerance -0/+4.9W
- IEC EN certified
- PID test passed
- Made in Europe
MAIN SPECIFICATIONS

Peak power $P_{mpp}$ 185 W
Peak power tolerance $-0/+4.9$
Short circuit current $I_{sc}$ 9.86
Open circuit voltage $V_{oc}$ 23.9
Rated current $I_{mppt}$ 9.4
Rated voltage $V_{mpp}$ 19.7
Current and voltage tolerance [%] $\leq 3$
Module efficiency [%] 18.39

STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5 g spectrum according to EN 60904-3
Average relative efficiency reduction of 3.4% at 200W/m² according to EN 60904-1

ELECTRICAL PARAMETERS AT NOMINAL CELL TEMPERATURE (NOCT)

Peak power $P$ 134.75
Peak power tolerance $-0/+4.9$
Short circuit current 7.92
Open circuit voltage 21.98
Rated current 7.53
Rated voltage 17.91

NOCT: module operating parameters at 800 W/m² irradiance, 20°C ambient temperature, 1 m/s wind speed

MECHANICAL DATA

Dimensions (H x H x D) [mm] 1482 x 676 x 35
Weight [kg] 18.3 / 18.0
Solar cells 36 cells, monocrystalline Si, 156 x 156 mm $\pm$ 1 mm
Cells encapsulation Ethylene vinyl acetate (EVA)
Front Solar glass, 3.2 mm
Back Composite polyester Film black
Frame Black anodized aluminium frame with twin-wall profile and drainage holes
Junction box IP67 with 3 Bypass diodes
Cable and connectors Solar cable 4 mm², length 1000 mm, PV4 connectors

OPERATING CONDITIONS

Temperature range [°C] -40 to +85
Maximum system voltage 1000
Max. series fuse rating 15A
Limiting reverse current 15A
Maximum surface load 5400 Pa (Snow load)
Resistance against hail Max. diameter of 25mm with impact speed 23 m/s

THERMAL CHARACTERISTICS

Temperature coefficient of $P_{mpp}$ [%/K] -0.42
Temperature coefficient of $I_{sc}$ [%/K] 0.05
Temperature coefficient of $V_{oc}$ [%/K] -0.33