



Key Features

- ▶ High module conversion efficiency, reducing installation costs and maximizing the kwh output per unit area
- ▶ Power tolerance of 0 to +3% minimizes PV system mismatch losses
- ▶ Anodized aluminum frame is mainly for improving corrosion resistance
- ▶ Highly transparent, low-iron, tempered glass, and antireflective coating
- ▶ Excellent performance under low light environments

Advantages

- ▶ Extensive 10-year limited product warranty on materials and workmanship; 25-year limited warranty on power put
- ▶ Product liability insurance: Zurich insurance
- ▶ Local warehousing and technical support
- ▶ In-house manufacturing of solar cells and modules ensures tight control of our material and production quality

Applications

- ▶ On-grid residential/commercial/industrial roof-tops
- ▶ Off-grid system
- ▶ Solar power plants



POLY-CRYSTALLINE SOLAR PANEL

HCP220P-18Series 190/195/200/205/210/215/220W

ELECTRICAL CHARACTERISTICS

Model type		HCP190P	HCP195P	HCP200P	HCP205P	HCP210P	HCP215P	HCP210P
Power output [Wp]	(Pmax)	190	195	200	205	210	215	210
Power output tolerance [%]	(ΔPmax)	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3
Module efficiency [%]	(η _m)	12.9	13.3	13.6	14.0	14.3	14.6	14.9
Maximum power voltage [V]	(V _{mpp})	26.4	26.6	26.8	27.0	27.1	27.2	27.3
Maximum power current [A]	(I _{mpp})	7.20	7.33	7.46	7.59	7.76	7.90	8.06
Open circuit voltage [V]	(V _{oc})	32.9	33.1	33.3	33.4	33.5	33.6	33.7
Short circuit current [A]	(I _{sc})	7.92	8.10	8.16	8.24	8.33	8.44	8.58
Maximum system voltage [V]		DC 1000						
Maximum series fuse rating [A]		20						

Values at Standard Test Conditions (STC): 1000W/m² irradiance, AM1.5 solar spectrum and 25 °C module temperature

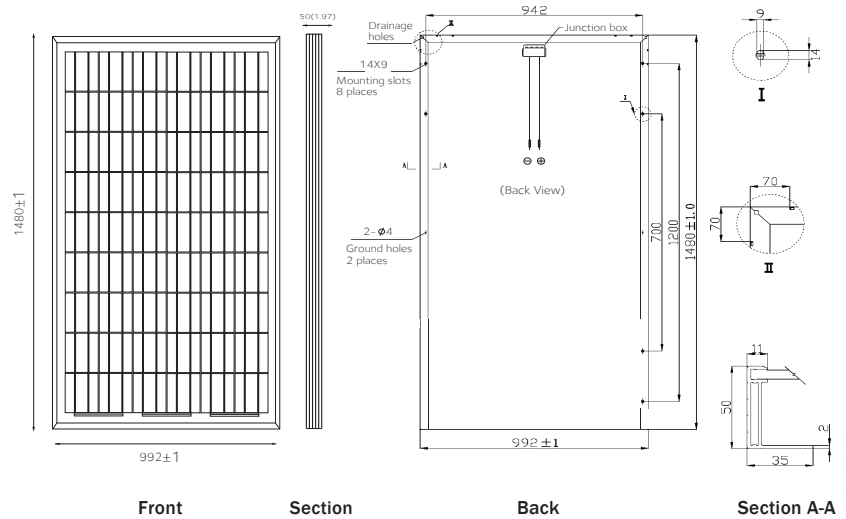
MECHANICAL CHARACTERISTICS

Solar Cells	54 pcs polycrystalline 6" silicon cells (156mm × 156mm)
Front cover	High transmission 3.2mm (1/8 th in) glass
Encapsulant	Ethylene vinyl acetate (EVA)
Back cover	White polyester
Frame	Anodized aluminum alloy/silver/Clear
Junction box	1 box with 3 bypass diodes, IP 65 rated
Cable	Length 900 mm, 4mm ² cable, with latching MC4 connectors
Dimensions	1480 × 992 × 50mm (58.27 × 39.06 × 1.97 in)
Weight	17.5 kg (38.58 lbs)

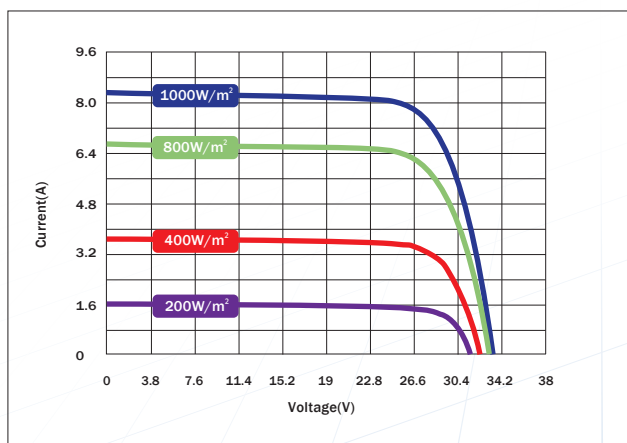
TEMPERATURE COEFFICIENTS

Temp. Coeff. Of I _{sc} (TK I _{sc})	(0.045±0.01) %/°C
Temp. Coeff. Of V _{oc} (TK V _{oc})	(-0.34) %/°C
Temp. Coeff. Of P _{max} (TK P _{max})	(-0.47±0.05) %/°C
NOCT	(45±2) /°C

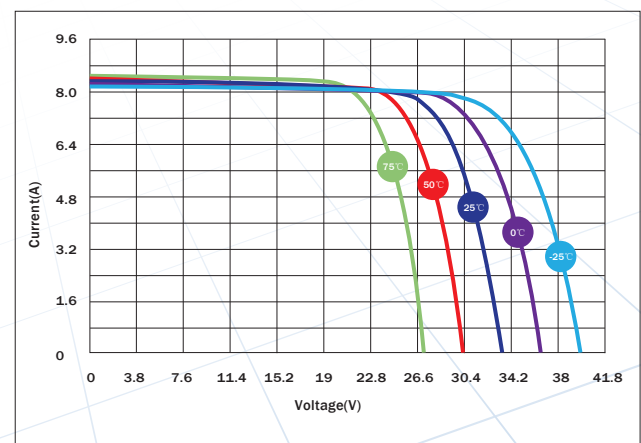
*NOCT (Nominal Operation Cell Temperature): Module operation temperature at 800 W/m² irradiance, 20°C air temperature, 1 m/s wind speed.



DEPENDENCE OF THE IRRADIANCE



DEPENDENCE OF THE TEMPERATURE



Your HC Solar Partner

CAUTION: Read the instruction manual entirely before handling, installing, and operating HC modules.