

## POLY-CRYSTALLINE SOLAR PANEL

HCP240P-20Series 215-240W



### 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

HCP240P-20Series 215/220/225/230/235/240W

# ELECTRICAL CHARACTERISTICS

Model type		HCP215P	HCP220P	HCP225P	HCP230P	HCP235P	HCP240P
Power output [ Wp ]	(Pmax)	215	220	225	230	235	240
Power output tolerance [ % ]	( $\Delta$ Pmax)	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3
Module efficiency [ % ]	( $\eta_m$ )	13.1	13.4	13.7	14.0	14.3	14.6
Maximum power voltage [ V ]	(Vmpp)	29.5	29.7	29.7	30.0	30.1	30.3
Maximum power current [ A ]	(Impp)	7.29	7.41	7.58	7.67	7.81	7.92
Open circuit voltage [ V ]	(Voc)	36.5	36.7	36.7	36.9	37.0	37.1
Short circuit current [ A ]	(Isc)	7.95	8.05	8.15	8.27	8.35	8.42
Maximum system voltage [ V ]				DC 1000			
Maximum series fuse rating [ A ]				20			

Values at Standard Test Conditions (STC): 1000W/m<sup>2</sup> irradiance, AM1.5 solar spectrum and 25 °C module temperature

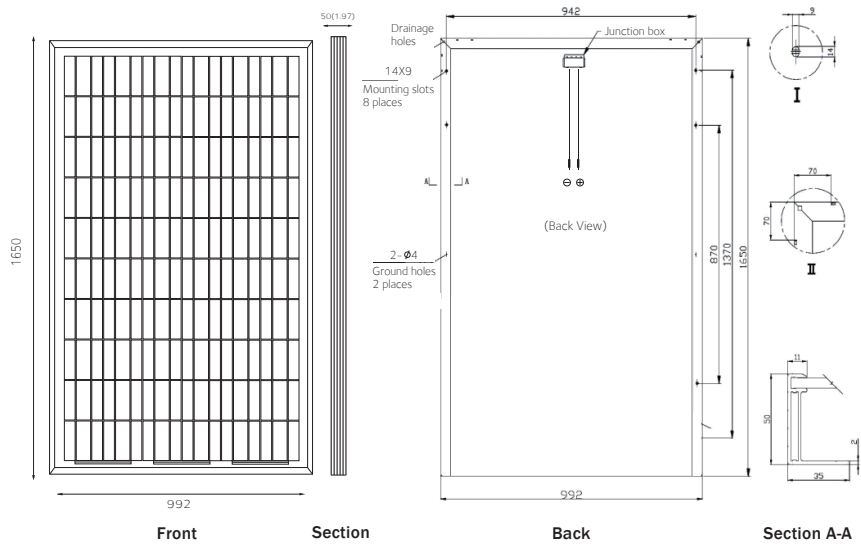
## MECHANICAL CHARACTERISTICS

Solar Cells	60 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 <sup>2</sup> cable, with latching MC4 connectors
Dimensions	1650 × 992 × 50mm (64.96 × 39.06 × 1.97 in)
Weight	19.5 kg (42.99 lbs)

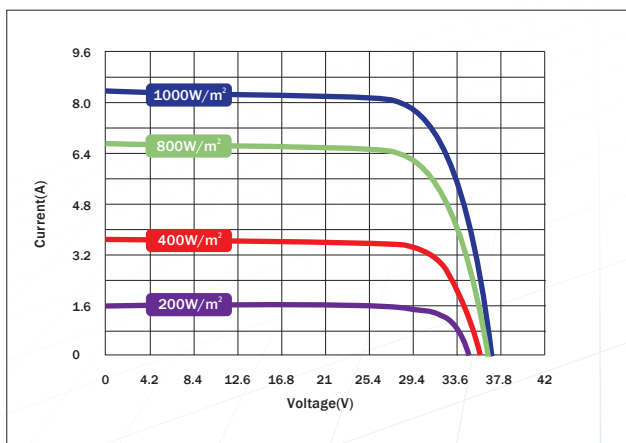
## TEMPERATURE COEFFICIENTS

Temp. Coeff. Of Isc (TK Isc)	(0.045±0.01)%/°C
Temp. Coeff. Of Voc (TK Voc)	(-0.34) %/°C
Temp. Coeff. Of Pmax (TK Pmax)	(-0.47±0.05) %/°C
NOCT	(45±2) /°C

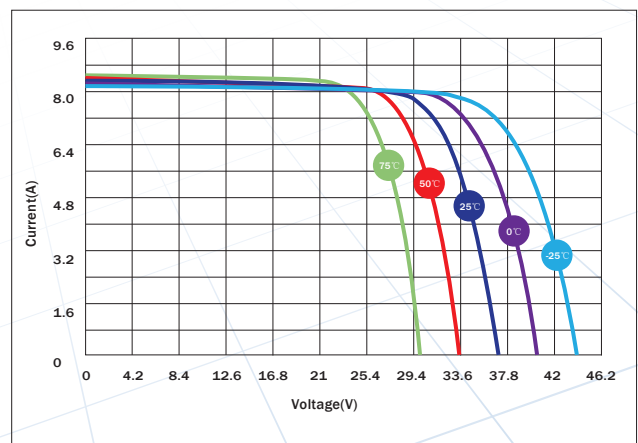
\*NOCT (Nominal Operation Cell Temperature): Module operation temperature at 800 W/m<sup>2</sup> irradiance, 20°C air temperature, 1 m/s wind speed.



## 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.