

### 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 7-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



# MONO-CRYSTALLINE SOLAR PANEL

HCP250D-32Series 200/205/210/215/220/225/230/235/240/245/250W

# ELECTRICAL CHARACTERISTICS

Model type		HCP200D	HCP205D	HCP210D	HCP215D	HCP220D	HCP225D	HCP230D	HCP235D	HCP240D	HCP245D	HCP250D
Power output [ Wp ]	(Pmax)	200	205	210	215	220	225	230	235	240	245	250
Power output tolerance [ % ]	( $\Delta$ Pmax)	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3
Module efficiency [ % ]	( $\eta_m$ )	12.0	12.3	12.6	12.9	13.1	13.4	13.7	14.0	14.3	14.6	14.9
Maximum power voltage [ V ]	(Vmpp)	47.0	47.2	47.2	47.3	47.3	47.5	47.6	47.8	48.0	48.2	48.2
Maximum power current [ A ]	(Impp)	4.26	4.35	4.45	4.55	4.65	4.47	4.84	4.92	5.00	5.08	5.18
Open circuit voltage [ V ]	(Voc)	57.4	57.6	57.6	57.8	57.8	58.9	59.2	59.4	59.6	59.8	59.8
Short circuit current [ A ]	(Isc)	4.74	4.81	4.89	4.95	5.02	5.06	5.10	5.15	5.20	5.27	5.35
Maximum system voltage [ V ]		DC 1000										
Maximum series fuse rating [ A ]		15										

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

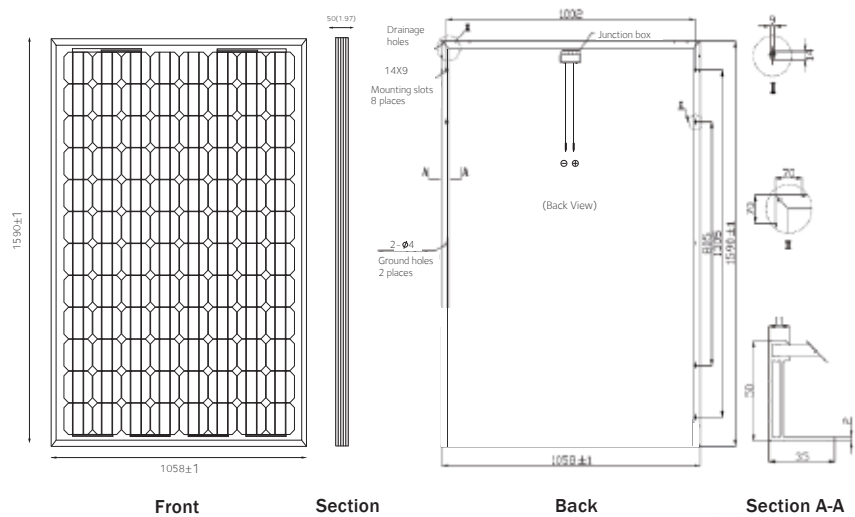
## MECHANICAL CHARACTERISTICS

Solar Cells	96 pcs monocrystalline 5" silicon cells (125 mm x 125 mm)
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	1590 x 1058 x 50mm (62.66 x 41.65 x 1.97 in)
Weight	20 kg (44.09 lbs)

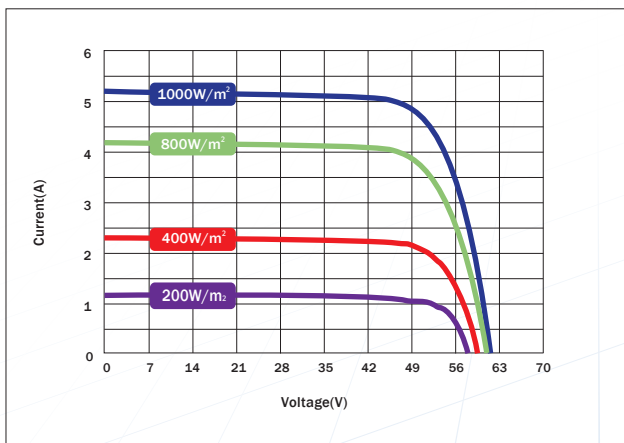
## TEMPERATURE COEFFICIENTS

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

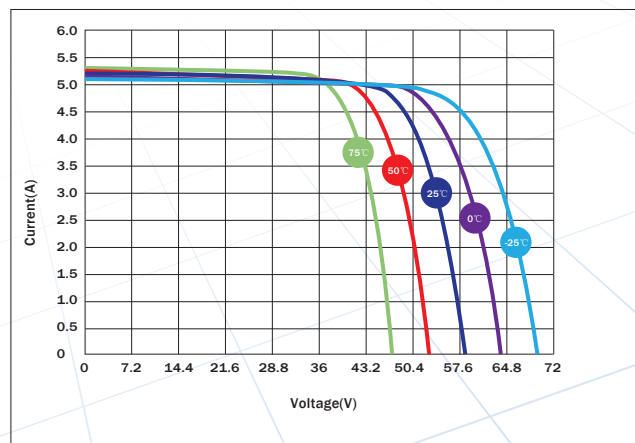
\*NOCT (Nominal Operation Cell Temperature): Module operation temperature at 800 W/m<sup>2</sup> irradiance, 20°C air temperature, 1 m/s wind speed.



## 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.