Honeywell

HW-7N144-BF

560W~590W

MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

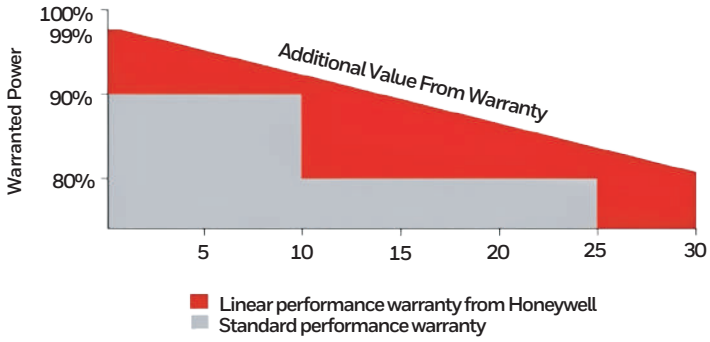
- High module conversion efficiency up to 22.84% by using innovative N-Type Topcon cell technology.
- Extremely low LID (light induced degradation) and low annual power degradation ensure higher energy yield during the module's lifetime.
- Low temperature coeficient and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation (PID) resistance.

CERTIFICATIONS

- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental managements system
- ISO 45001:2018: Occupational health and safety management system

SPECIAL WARRANTY

- 20 years product warranty
- 30 years linear power output warranty



Passionately committed to delivering innovative energy solution

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ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (P_{max})	560W	565W	570W	575W	580W	585W	590W
Open Circuit Voltaje (V_{oc})	50.4 V	50.6 V	50.8 V	51.0 V	51.2 V	51.4 V	51.6 V
Short Circuit Current (I_{sc})	14.04 A	14.09 A	14.14 A	14.19 A	14.24 A	14.29 A	14.34 A
Voltage at Maximum Power (V_{mp})	42.2 V	42.4 V	42.6 V	42.8 V	43.0 V	43.2 V	43.4 V
Current at Maximum Power (I_{mp})	13.28 A	13.33 A	13.39 A	13.44 A	13.49 A	13.54 A	13.59 A
Module Efficiency (%)	21.68	21.87	22.07	22.26	22.45	22.65	22.84
Operating Temperature	-40°C to +85°C						
Maximum System Voltage	1500V DC						
Fire Resistance Rating	Class C						
Maximum Series Fuse Rating	30 A						

STC: Irradiance 1000W/m2, Cell temperature 25°C, AM1.5; Tolerance of Pmax: ±3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (P_{max})	421W	425W	429W	433W	437W	441W	445W
Open Circuit Voltaje (V_{oc})	47.9V	48.1V	48.3V	48.5V	48.7V	48.9V	49.1V
Short Circuit Current (I_{sc})	11.37 A	11.41 A	11.45 A	11.49 A	11.53 A	11.57 A	11.61 A
Voltage at Maximum Power (V_{mp})	39.7 V	39.9 V	40.1 V	40.3 V	40.5 V	40.7 V	40.9 V
Current at Maximum Power (I_{mp})	10.61 A	10.66 A	10.70 A	10.75 A	10.80 A	10.85 A	10.90 A

NOCT: Irradiance 800W/m2, Ambient temperature 20°C, Wind Speed 1 m/s

ELECTRICAL CHARACTERISTICS WHIT DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: HW-7N144-BF-570W)

Power Gain	P_{max}	V_{oc}	I_{sc}	V_{mp}	I_{mp}
10 %	627W	50.8V	15.54A	42.6V	14.72A
15 %	656W	50.8V	16.25A	42.6V	15.40A
20 %	684W	50.8V	16.96A	42.6V	16.06A
25 %	713W	50.8V	17.67A	42.6V	16.74A
30 %	741W	50.8V	18.36A	42.6V	17.40A

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline N-type 182*91mm
Number of cells	144 (6x24)
Module dimensions	2279x1134x30mm
Weight	32kg
Front/Back Glass	2mm AR coated tempered glass/2mm tempered glass
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm2, Portrait: 300mm: Landscape: 1300mm
Connector	MC4 or MC4 compatible

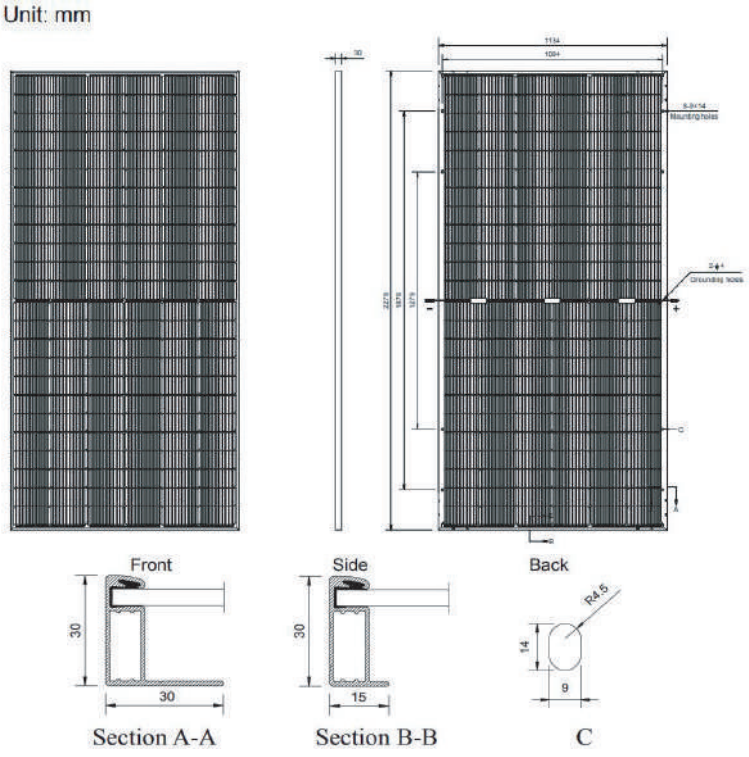
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of Pmax)	-0.30%/°C
Temperature Coefficients of VOC	-0.25%/°C
Temperature Coefficients of ISC	0.045%/°C

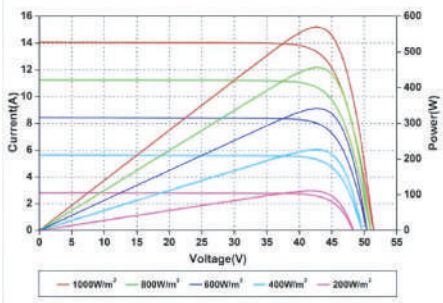
PACKAGING

Standard packaging	36 pcs/pallet
Module quantity per 20' container	180 pcs
Module quantity per 40' container	720 pcs (HQ)

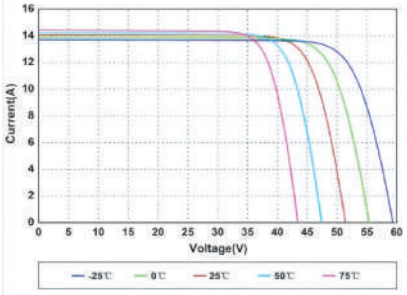
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

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