



ERA-60HC

Monocrystalline Half-Cut Solar Module

KEY FEATURES

- MBB Half-Cut Solar Cell:**
120 cells (6X10X2); 10/11 busbar solar cell.
- Higher Module Conversion Efficiency:**
Higher module output up to 455W with module efficiency up to 21%.
- Low-light Performance:**
Advanced glass and surface texturing allow for excellent performance in low-light environments.
- Light-weight design**
Light-weight design using transparent backsheet for easy installation and low BOS cost.
- Higher Power Output**
Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

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+ WATTS POSITIVE TOLERANCE

12 YEARS PRODUCT WARRANTY

25 YEARS LINEAR POWER WARRANTY

182mm SERIES, 60-CELL HALF-CUT SERIES

ELECTRICAL PERFORMANCE

Module type: ESPHSC	435M / 440M / 445M / 450M / 455M
Maximum Power(Wp)	435W 440W 445W 450W 455W
Open circuit Voltage(Voc)	40.65V 40.85V 41.05V 41.25V 41.45V
Short circuit Current(Isc)	13.65A 13.72A 13.78A 13.85A 13.92A
Maximum Power Voltage(Vm)	34.10V 34.30V 34.50V 34.70V 34.90V
Maximum Power Current(Imp)	12.76A 12.83A 12.90A 12.97A 13.04A
Module efficiency	20.1% 20.3% 20.5% 20.8% 21%
Maximum Series Fuse	25A
Watts positive tolerance	0~+3%
Number of Diode	3
Standard Test Conditions	1000W/M ² , 25°C, AM1.5
Maximum System Voltage	1500V/DC
Temperature-Coefficient Isc	+0.048%/°C
Temperature-Coefficient Voc	-0.270%/°C
Temperature-Coefficient Pmpp	-0.350%/°C
Normal Operating Cell Temperature	-40°C...+85°C
Load Capacity for the cover of the module (glass)	5400Pa(IEC61215)(snow)
Load Capacity for the front & back of the module	2400Pa(IEC61215)(wind)

ELECTRICAL PERFORMANCE (NOCT)

Module type: ESPHSC	435M / 440M / 445M / 450M / 455M
Maximum Power(Wp)	329W 332.5W 336.5W 340W 344W
Open circuit Voltage(Voc)	38.20V 38.40V 38.60V 38.80V 39.00V
Short circuit Current(Isc)	10.85A 10.90A 10.95A 11.00A 11.07A
Maximum Power Voltage(Vm)	32.20V 32.40V 32.60V 32.80V 33.00V
Maximum Power Current(Imp)	10.21A 10.26A 10.32A 10.38A 10.43A

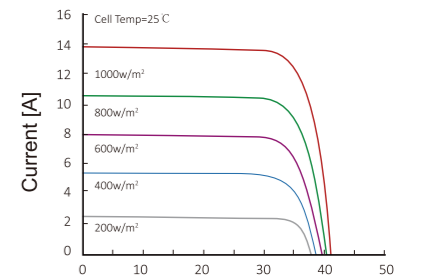
MECHANICAL CHARACTERISTICS

Front cover (material / thickness)	low-iron tempered glass / 3.2mm
Backsheet (color)	TPT in white
Cell (quantity / material / dimensions)	120(6x10x2) / monocrystalline silicon
Frame (material / color)	aluminum hollow-chamber frame on each side anodized aluminum alloy / silver
Junction box (protection degree)	≥IP68
Cables & Plug connectors	4mm ² , 300mm in length, length can be customized
Module Dimensions (L / W / H)	1909x1133x35mm
Module Weight	25kg
Application class	Class A
Electrical protection class	Class II
Fire safety class	Class C

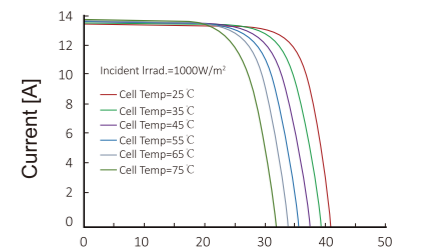
PACKING

Container Size	Units/Pallet (PCS)	Weight/Pallet (KG)	Pallet Measurement (mm)	Units/Container (PCS)
40HQ	31	790	1950x1130x1260	744

CURRENT-VOLTAGE CURVES:



Module characteristics at constant module temperatures of 25°C and variable levels of irradiance



Module characteristics at variable module temperatures and constant module irradiance of 1.000 W/m²

MODULE DIAGRAM:

