

Silver Series

ERA-RC48HD(BK)

Product Range

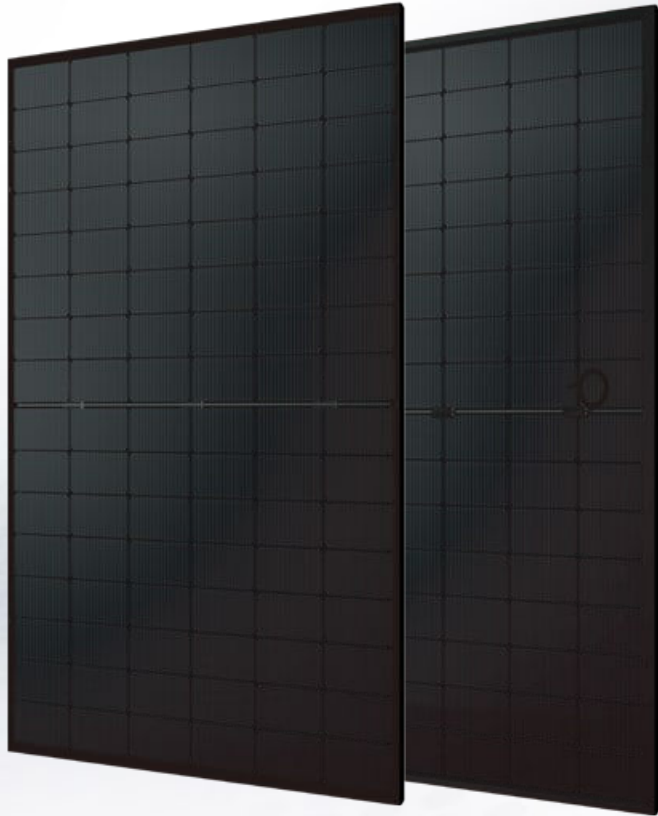
440-460W

N-Type Bifacial
Double Glass

460W
Maximum Power Output

0~+5W
Positive Power Tolerance

23.02%
Maximum Efficiency



Linear Performance Warranty

15

Year Product Warranty

30

Year Linear Power Warranty

<1%

First year Power Degradation

<0.4%

Year 2-30 Power Degradation

Certifications

Quality Management System and Product Certification.

IEC61215(2021), IEC61730(2023), IEC61701

IEC61215-2 (bifaciality): 2021

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018: Occupational health and safety management systems

IEC

CE

TUV

ISO

ISO

ISO

ISO

ISO

MBB Half-Cut Solar Cell

182x105mm, 96 cells.

Higher Module Conversion Efficiency

Higher module output up to 460W with module efficiency up to 23.02%.

Low-Light Performance

Advanced glass and surface texturing allow for excellent performance in low-light environments.

Transparent Dual-glass Design

Excellent fire rating, with better temperature coefficiency.

Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

Double Glass, 182x210mm , 48-CELL HALF-CUT SERIES

ELECTRICAL PARAMETERS AT STC

Module Type: ERA-RC48HD(BK)	440M	/	445M	/	450M	/	455M	/	460M
Maximum Power(Wp)	440W		445W		450W		455W		460W
Open Circuit Voltage(Voc)	34.80V		35.00V		35.20V		35.40V		35.60V
Short Circuit Current(Isc)	16A		16.05A		16.10A		16.15A		16.20A
Maximum Power Voltage(Vm)	28.80V		29.00V		29.20V		29.40V		29.60V
Maximum Power Current(I _m)	15.28A		15.35A		15.41A		15.48A		15.54A
Module Efficiency	22.02%		22.27%		22.52%		22.77%		23.02%
Maximum Series Fuse	30A								
Watts Positive Tolerance	0~+5W								
Number Of Diode	3								
Standard Test Conditions	1000W/M²,25°C,AM1.5								
Maximum System Voltage	1500V/DC								
Temperature-Coefficient Isc	+0.035%/°C								
Temperature-Coefficient Voc	-0.259%/°C								
Temperature-Coefficient P _{mp}	-0.2482%/°C								
Operating Temperature	-40°C...+85°C								
Normal Operating Cell Temperature	45±2°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)								

BNPI (1000w/m² + 135w/m²)

Module Type: ERA-RC48HD(BK)	440M	/	445M	/	450M	/	455M	/	460M
Maximum Power(Wp)	484W		490W		495W		501W		506W
Open Circuit Voltage(Voc)	34.83V		35.02V		35.24V		35.41V		35.60V
Short Circuit Current(Isc)	17.60A		17.66A		17.71A		17.80A		17.86A
Maximum Power Voltage(Vm)	28.81V		29.02V		29.21V		29.41V		29.60V
Maximum Power Current(I _m)	16.80A		16.89A		16.95A		17.04A		17.10A

BSI (1000w/m² + 300w/m²)

Module Type: ERA-RC48HD(BK)	440M	/	445M	/	450M	/	455M	/	460M
Maximum Power(Wp)	541W		547W		553W		559W		565W
Open Circuit Voltage(Voc)	34.81V		35.01V		35.22V		35.41V		35.62V
Short Circuit Current(Isc)	19.66A		19.72A		19.78A		19.85A		19.91A
Maximum Power Voltage(Vm)	28.81V		29.01V		29.22V		29.41V		29.62V
Maximum Power Current(I _m)	18.78A		18.86A		18.93A		19.01A		19.08A

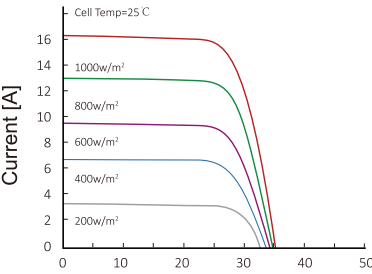
MECHANICAL CHARACTERISTICS

Front Glass	2.0mm high transmittance, AR semi-tempered glass
Rear Glass	2.0mm semi-tempered glass
Cell (Quantity / Material / Dimensions)	96(6x8x2) / monocrystalline silicon,bifacial
Frame (Material / Color)	aluminum hollow-chamber frame on each side anodized aluminum alloy / silver
Junction Box (Protection Degree)	≥IP68
Cables & Plug Connectors	4mm², 300mm in length,length can be customized
Module Dimensions (L / W / H)	1762x1134x30mm
Module Weight	22.5 kg
Application Class	Class A
Electrical Protection Class	Class II
Fire Safety Class	Class A

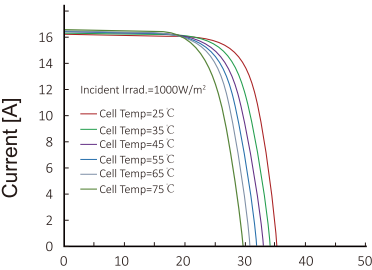
PACKING

Container Size	Units/Pallet (PCS)	Weight/Pallet (KG)	Pallet Measurement (mm)	Units/Container (PCS)
40HQ	36	845	1790x1120x1260	936

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:

