



# SR4-54HPB 390-410M

MAXIMUM EFFICIENCY %

20.70

POSITIVE POWER TOLERANCE WP

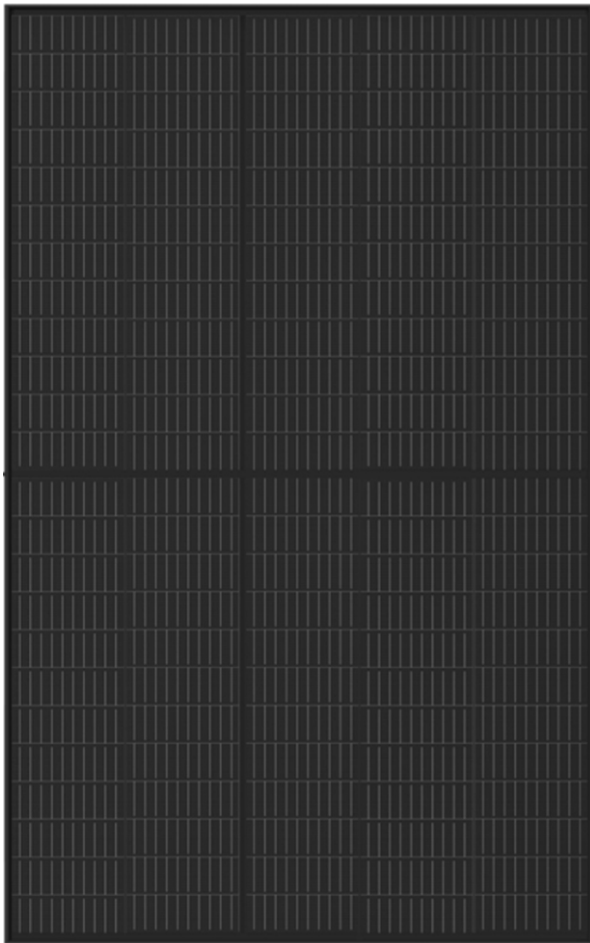
0~+5.00

CELLS

M12 120

MODULE TECHNOLOGY

HALF CUT & MICRO GAP DESIGN  
WITH IMPROVED SHADE TOLERANCE



CYLINDRICAL TABBING WIRE increases cell absorption by enhancing scattering effect



Implementation of bypass diodes in split JB series-parallel connections enable the module to perform in PARTIAL SHADOW CONDITIONS with respect to full-cell module



HIGHER NUMBER OF BUSBAR makes the PV modules less prone to loss in efficiency and increase tolerance to micro cracks



FIELD RELIABILITY is improved due to multiple contact points on the cell which lowers the cell stress during module fabrication



LCOE IS CUT BACK by using M12 size solar cell with adding more power output than lower size cell module



LOWER INTERNAL RESISTANCE boosts module power helping to achieve minimal power loss with respect to previous variant modules

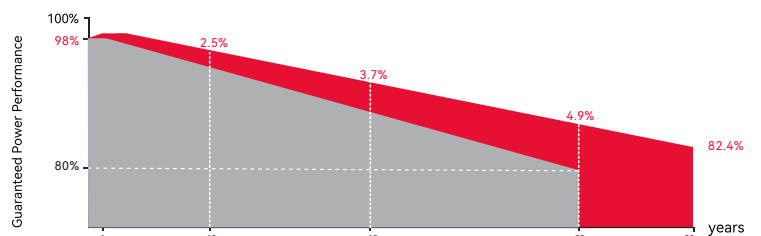


GREAT AESTHETICS FOR DARK ROOFS ALL BLACK module can increase the aesthetic value of your home with a more modern design

## Linear Performance Warranty

15 years  
Quality assurance

30 years  
Power output guarantee



Industry Standard



Backsheet



## MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	210x210mm
Cell Arrangement	120 (6x20)
Weight	21kg (46.3lbs)
Module Dimensions	1754×1096×30 mm (69.06×43.15×1.18 inches)
Cable Length	300mm in Length or Customized Length
Cable Cross Section Size	TUV: 4mm <sup>2</sup> (0.006inches <sup>2</sup> )/UL: 12AWG
Front Glass	3.2mm (0.13inches) AR Coating Tempered Glass
No. of Bypass Diodes	3
Packing Configuration (1)	36pcs/carton, 936pcs/40hq
Packing Configuration (for USA)	36pcs/carton, 936pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	Ip68

## OPERATING CONDITIONS

Maximun System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	20A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible

## TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	43±2°C

## ELECTRICAL PARAMETERS

Performance at STC (Power Tolerance 0 ~ +3%)

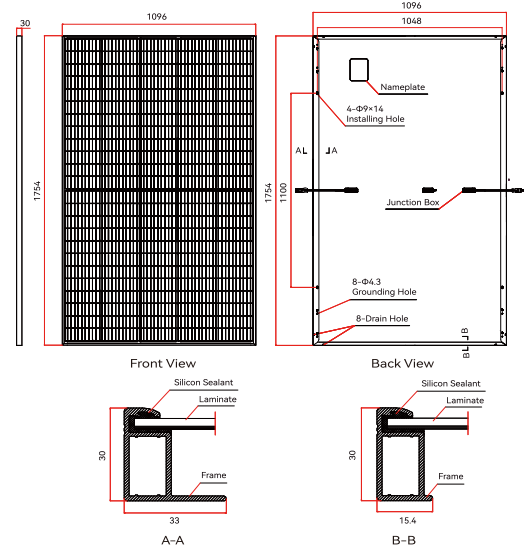
	390	395	400	405	410
Maximum Power (Pmax/W)	390	395	400	405	410
Operating Voltage (Vmpp/V)	33.8	34.0	34.2	34.4	34.6
Operating Current (Impp/A)	11.54	11.62	11.70	11.77	11.84
Open-Circuit Voltage (Voc/V)	40.8	41.0	41.2	41.4	41.6
Short-Circuit Current (Isc/A)	12.14	12.21	12.28	12.34	12.40
Module Efficiency ηm(%)	19.8	20.0	20.3	20.5	20.7

Performance at NMOT

	295	298	302	306	310
Maximum Power (Pmax/W)	295	298	302	306	310
Operating Voltage (Vmpp/V)	31.8	32.0	32.2	32.5	32.7
Operating Current (Impp/A)	9.26	9.32	9.38	9.44	9.50
Open-Circuit Voltage (Voc/V)	38.4	38.6	38.8	38.9	39.1
Short-Circuit Current (Isc/A)	9.78	9.84	9.90	9.95	10.01

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

## TECHNICAL DRAWINGS



## I-V CURVE

