

HRAP-120H 440-455M10

21.02%
Maximum Module Efficiency

455W
Maximum Power Output

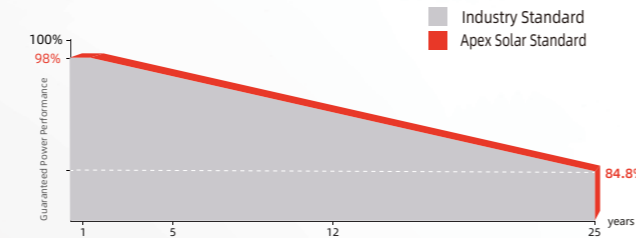
Power Shorting Tolerance: 0~+3W

1909×1134×30mm
Module Dimensions

IEC 61215 / IEC 61730
Fire safety class: Class C according to UL790
ISO 9001 :Quality Management System
ISO 14001 :Environment Management



Industry Leading Linear Power Warranty
12-year Warranty for Materials and Processing . 25-year Warranty for Extra Linear Power Output



12 Process Warranty **25** Power Warranty

- 0-±3%**
Guaranteed 0-±3% positive tolerance ensures the power output reliability
- High customer value**
Lower cost per kilowatt hour.High quality silicon wafer guarantee, high power module output, excellent cost performance advantage, is an ideal choice for solar power stations
- Highly reliable due to stringent quality control**
Three times strict EL testing beyond certification requirements
- Fusion of MBB and half-cut cells technology**
The new circuit design, minimizes the impact of shadow on the power generation of solar module.Excellent light utilization and current collection capacity, effectively improve product power output and reliability
- Excellent Anti-PID performance**
Ensure that the scale production passes the PID test, and greatly reduce the attenuation caused by PID by optimizing the wafer process
- Outstanding low light performance**
The coated glass with high transmittance and the surface technology of the wafer are used to achieve excellent performance in low light environment

High Efficiency Half-cells Solar Panel HRAP-120H 440-455M10

ELECTRICAL PARAMETERS AT STC

Rated Maximum Power(Pmax) [W]	440	445	450	455
Maximum Power Voltage(Vmp) [V]	33.91	34.06	34.21	34.36
Maximum Power Current(Impp) [A]	12.98	13.07	13.16	13.25
Open Circuit Voltage(Voc) [V]	40.95	41.1	41.25	41.4
Short Circuit Current(Isc) [A]	13.41	13.52	13.62	13.72
Module Efficiency [%]	20.33	20.56	20.79	21.02

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5

ELECTRICAL PARAMETERS AT NMOT

Rated Maximum Power(Pmax)[W]	330	334	338	342
Maximum Power Voltage(Vmp) [V]	31.34	31.49	31.64	31.79
Maximum Power Current(Impp) [A]	10.54	10.62	10.69	10.77
Open Circuit Voltage(Voc) [V]	37.76	37.91	38.06	38.21
Short Circuit Current(Isc) [A]	11.19	11.28	11.36	11.45

NMOT: Irradiance 800 W/m² ambient temperature 20°C wind speed: 1m/s

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182×182mm
Cell Arrangement	120(6×20)
Weight	23.5kg(±3%)
Module Dimensions	1909×1134×30mm
Cable	4.0 mm ² positive/negative:300mm(11.8inches),length Can be customized
Front Glass	3.2 mm high transmittance,AR coating tempered glass
Frame	Anodized aluminium alloy
junction Box	Protection class Ip68
Connector	Mc4 Compatible
Mechanical Load	Front side 5400Pa/Rear side 2400Pa

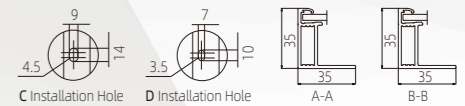
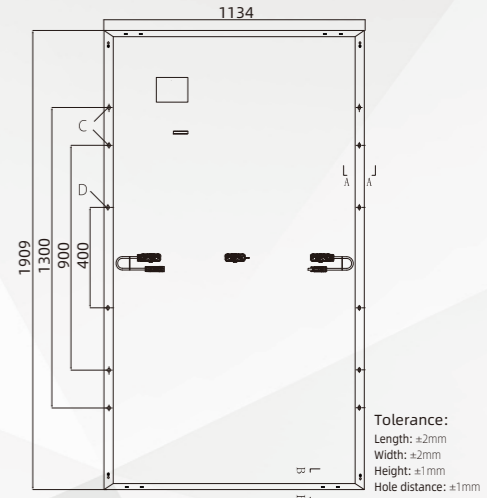
OPERATING CONDITIONS

Maximum System Voltage (V)	1000VDC/1500VDC
Pmax Temperature Coefficient	-0.34%/°C
Voc Temperature Coefficient	-0.28%/°C
ISC Temperature Coefficient	+0.05 %/°C
Nominal Operating Cell Temperature	45±2°C
Operating Temperature	- 40°C-+85°C
Maximum Series Fuse	20A

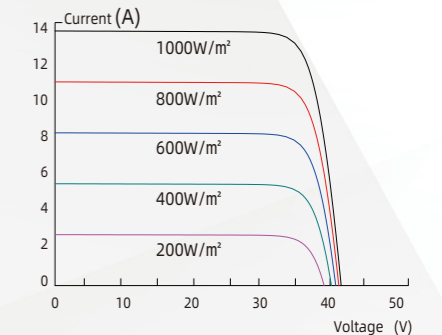
PACKING CONFIGURATION

Quantity/Pallet	36pcs/pallet
Quantity/Container	864pcs/40HQ

Module Dimension(mm)



Current-Voltage Curve (455W)



Power-Voltage Curve (455W)

