

# Module HC 120

## 450-460 Watt

Positive power tolerance of 0~+3%

HALF CELL - MONO PERC 120 CELL  
BIFACIAL ALL BLACK MODULE



UL61730 certified product

UL61215 certified product



### KEY FEATURES



#### Multi Busbar Solar Cell

Multi busbar solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.



#### High Efficiency

Higher module conversion efficiency (up to 21.32% benefit from half cell structure (low resistance characteristic)).



#### PID Resistance

Excellent Anti-PID performance guarantee limited power degradation for mass production.



#### Low-light Performance

Advanced glass and cell surface textured design ensure excellent performance in low-light environment.



#### Severe Weather Resilience

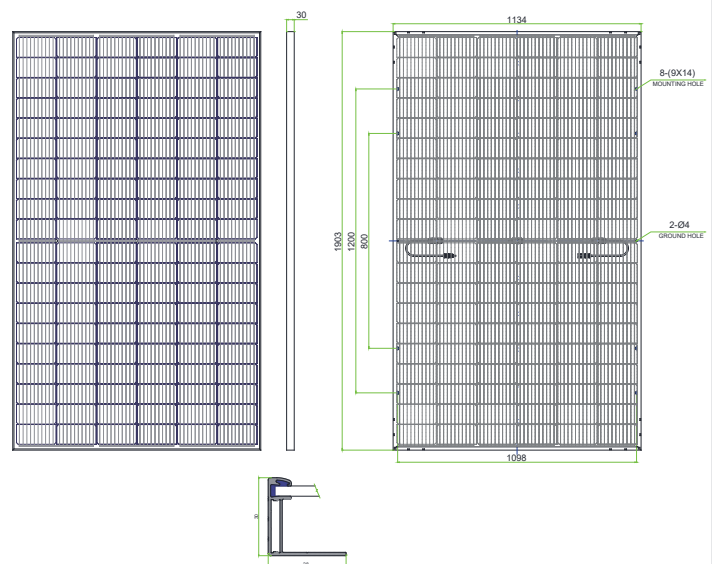
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



#### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.

### ENGINEERING DRAWINGS

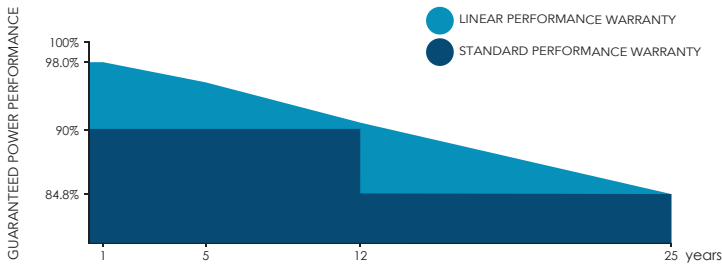


### PACKAGING CONFIGURATION

(Two pallets = One stack)

36pcs/pallet, 72pcs/stack, 792pcs/53FT Truck

# LINEAR PERFORMANCE WARRANTY

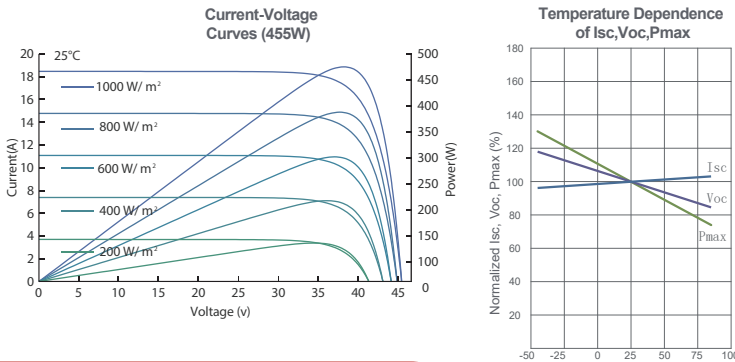


- 25-Year Product Warranty.
- 25-Year Efficiency Power Warranty +85 output.

# MECHANICAL CHARACTERISTICS

Cell Type	Mono PERC 182×91mm
No. of Half-cells	120 (6×20)
Dimensions	1903×1134×30mm (74.92×44.65×1.18 inch)
Weight	23.4 kg (51.59 lbs)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Black Anodized Aluminium Alloy
Junction Box	IP68 Rated, connector compatible with MC4
Output Cables	TÜV 1x4.0mm <sup>2</sup> , 450mm/1200mm or Customized Length
Fire Rating	UL: Type 4, IEC: Class C
Maximum static load	5400Pa(front side), 2400Pa(back side)

# ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE



Temperature Coefficients of Pmax	-0.35%/°C
Temperature Coefficients of Voc	-0.29%/°C
Temperature Coefficients of Isc	0.048%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C

# SPECIFICATIONS

Module Type	SE-182*91-450M-120-BH		SE-182*91-455M-120-BH		SE-182*91-460M-120-BH	
	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	450W	338W	455W	342W	460W	342W
Maximum Power Voltage (Vmp)	34.67	32.28	34.82	32.45	34.96	32.52
Maximum Power Current (Imp)	12.98	10.47	13.07	10.54	13.16	10.61
Open-circuit Voltage (Voc)	41.09	39.06	41.24	39.20	41.39	39.35
Short-circuit Current (Isc)	13.86	11.18	13.95	11.25	14.04	11.32
Module Efficiency STC (%)	20.85%		21.08%		21.32%	
Operating Temperature (°C)	-40°C ~+85°C					
Maximum System Voltage	1500VDC (IEC)					
Power Tolerance	[0,+5W]					
Maximum Series Fuse Rating	30A					
Electrical characteristics with different rear side power gain(reference to 455W front)						
	Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
	477	41.68	14.34	34.63	13.80	5%
	500	41.68	15.03	34.63	14.45	10%
	523	41.78	15.65	34.74	15.06	15%
	546	41.78	16.34	34.74	15.72	20%
	568	41.78	17.00	34.74	16.35	25%
	592	41.78	17.71	34.74	17.04	30%

- STC:** ☀ Irradiance 1000W/m<sup>2</sup>    🌡 Cell Temperature 25°C    ☁ AM=1.5  
**NOCT:** ☀ Irradiance 800W/m<sup>2</sup>    🌡 Ambient Temperature 20°C    ☁ AM=1.5    🌀 Wind Speed 1m/s

\* Power measurement tolerance: ± 3%