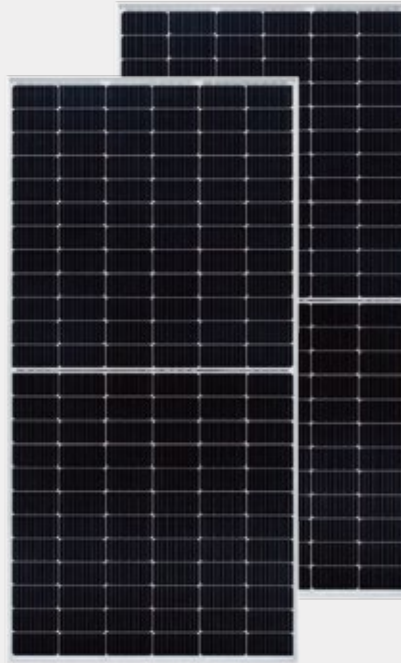




# BSM455M-72HPH

## 435-455W



**YOUR  
BEST  
PV  
SUPPLIER**

**455W**

Maximum Power Output

**20.8%**

Maximum Module Efficiency

**0~+5W**

Power Output Guarantee



Ideal choice for large scale ground installation



More evenly distributed soldering points and better reliability and lower hot spot risk



Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail trails free



Lower LID due to lower oxygen and carbon content



Special cell process ensures great performance under low irradiance conditions

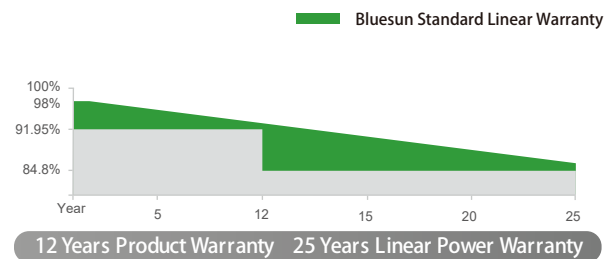


Provides higher module efficiency under low irradiance conditions, and achieves greater installation capacity in a limited space.

### Key features

- World-class manufacturer of crystalline silicon photovoltaic modules
- Fully automatic facility and world-class technology
- Rigorous quality control to meet the highest standard: ISO9001:2015, ISO14001: 2015 and OHSAS: 18001 2007
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing test: IEC 61701, IEC 62716, DIN EN 60068-2- 68)
- Long term reliability tests
- 2×100% EL inspection ensuring defect-free modules

### Linear Performance Warranty



\* Please refer to Bluesun standard warranty for details

### Certificate



+86-158-5821-3997



info@bluesunpv.com



+86 (551) 6565 2651



1499 Zhenxing Road, Shushan District, 230031 Hefei, China

www.bluesunpv.com

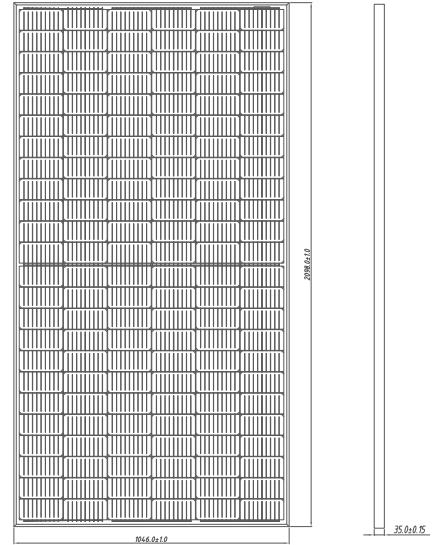


V.220225



# ELECTRICAL PARAMETERS AT STC

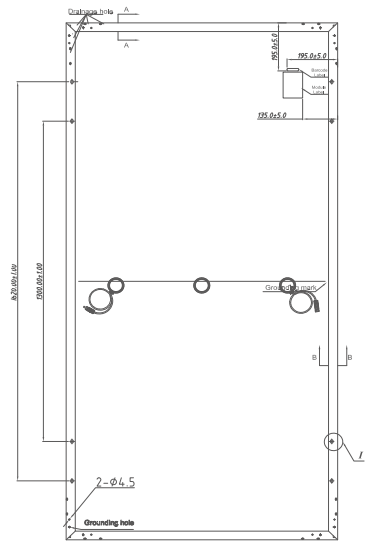
Model	BSM435M-72HPH	BSM440M-72HPH	BSM445M-72HPH	BSM450M-72HPH	BSM455M-72HPH
Max Power(Pmax) [W]	435	440	445	450	455
Open Circuit Voltage(Voc) [V]	49.0	49.2	49.4	49.6	49.8
Short Circuit Current(Isc) [A]	11.33	11.40	11.47	11.54	11.61
Max Power Voltage(Vmp) [V]	40.3	40.5	40.7	40.9	41.1
Max Power Current(Imp) [A]	10.80	10.87	10.94	11.01	11.08
Module Efficiency [%]	19.8	20.1	20.3	20.5	20.8
Power Tolerance	0-5W				
Max System Voltage	DC 1500/1000(IEC)				
Max Series Fuse Rating	20A				
Operating Temperature	-40 °C to +85 °C				
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25 °C, AM1.5				



# NMOT

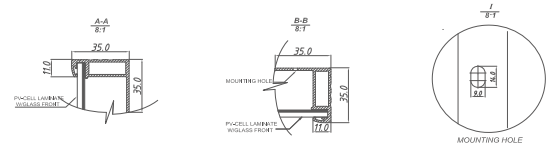
Model Number	BSM435M-72HPH	BSM440M-72HPH	BSM445M-72HPH	BSM450M-72HPH	BSM455M-72HPH
Max Power(Pmax) [W]	324	328	332	335	339
Open Circuit Voltage (Voc)	45.6	45.8	46.0	46.2	46.4
Short Circuit Current (Isc)	9.15	9.20	9.26	9.32	9.37
Maximum Power Voltage (Vmp)	37.6	37.8	38.0	38.2	38.4
Maximum Circuit Current (Imp)	8.62	8.67	8.73	8.78	8.84
NMOT	43±2°C				

\*Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, wind speed 1 m



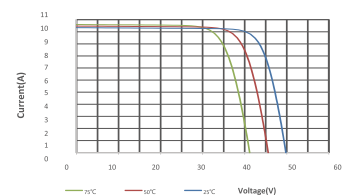
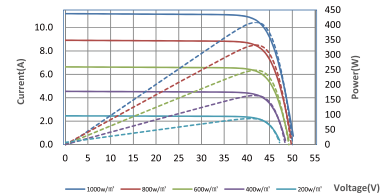
# Mechanical Characteristics

Solar Cells	Mono Perc 166×166mm(6inches)
Dimensions	2094*1046*35mm (82.60*41.18*1.38inches)
Weight	25.5kg (56.2lbs)
Front Load	5400Pa
Connector Type	PV Connector
Junction Box	IP68,3/6 bypass diode
Cables	4mm <sup>2</sup> (IEC)
Glass	3.2mm High Transmission Tempered Glass
Frame	Anodized Aluminium Alloy Frame
Packing	30pcs per pallet, 260pcs per 20'GP,660pcs per 40'HC



# I-V Curves

Current-Voltage Curve (BSM455M-72HPH)



# Temperature Characteristics

Temperature Coefficient of Pmax	γ (Pm)	-0.36%/ °C
Temperature Coefficient of Voc	β (Voc)	-0.26%/ °C
Temperature Coefficient of Isc	α (Isc)	0.043%/ °C

