

BISTAR

GSP7F60M GSP7F60M(H) 120-cell

440 - 460W 10BB Half-cut Mono Perc

SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems







PERFORMANCE WARRANTY

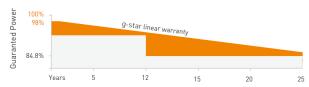






Linear Performance Warranty

Standard Performance Warranty







10BB Half-cut Cell Technology

New circuit design, lower internal current, lower Rs loss Ga dopped wafer, attenuation < 2% (1st year) / ≤0.55% (Linear)



Significantly Lower the Risk of Hot Spot

Special circuit design with much lower hot spot temperature



Lower LCOE

2% more power generation, lower LCOE



Excellent Anti-PID Performance

2 times of industry standard Anti-PID test



IP68 Junction Box

High waterproof level

ELECTRICAL CHARACTERISTICS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	440	328	445	332	450	336	455	339	460	343
Operating Voltage (Vmpp/V)	34. 35	32. 1	34. 53	32. 2	34. 70	32. 4	34. 87	32.6	35. 04	32.7
Operating Current (Impp/A)	12.81	10. 23	12.89	10.30	12. 97	10.36	13. 05	10. 42	13. 13	10.49
Open-Circuit Voltage (Voc/V)	40. 99	38. 6	41. 16	38. 7	41. 33	38. 9	41.50	39. 1	41. 67	39. 2
Short-Circuit Current (Isc/A)	13. 69	11.04	13. 78	11. 11	13. 86	11. 17	13. 94	11. 24	14. 02	11.30
Module Efficiency (%)	20.	30	20.	60	20.	80	21	. 10	21.	30

STC: Irradiance 1000W/m², Spectra at AM1.5, Module Temperature 25 $^{\circ}$ C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: $\pm 3\%$ NMOT: Irradiance 800W/m², Spectra at AM1.5, Ambient Temperature 20 $^{\circ}$ C, Wind speed 1m/s

MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline Silicon (10Busbar)		
No. of Cells	120pcs in series (6*20)		
Module Dimensions	1908*1134*35mm (75.12*44.65*1.38inches)		
Weight	24.3kg (53.61bs.)		
Front Glass	3.2mm AR Coating Tempered Glass		
Frame	Anodized Aluminium Alloy		
Junction Box	IP68, 3 Bypass Diodes		
Output Cables	4mm² (IEC), 12AWG(UL) 300mm in Length or Customized Length		
Connectors	T01/LJQ-3-CSY/MC4/MC4-EV02		

APPLICATION CONDITIONS

Maximun System Voltage	1000V/1500V/DC		
Operating Temperature	-40° C~+85° C		
Maximun Series Fuse	25A		
Safety Protection Class	ClassII		
Mechanical Load (Front side)	5400Pa		
Mechanical Load (Back side)	2400Pa		

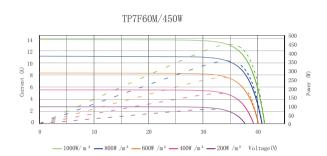
TEMPERATURE CHARACTERISTICS

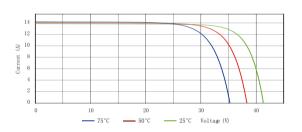
Temperature Coefficient of Pmax	−0.35%/° C
Temperature Coefficient of Voc	−0. 26%/° C
Temperature Coefficient of Isc	+0.048%/° C
Nominal Module Operating Temperature(NMOT)	43±2° C

PACKING CONFIGURATION

Pieces Per Pallet	31	31 (USA)
Pieces Per Container(40'HQ)	744	744

I-V CURVE





TECHNICAL DRAWINGS

