

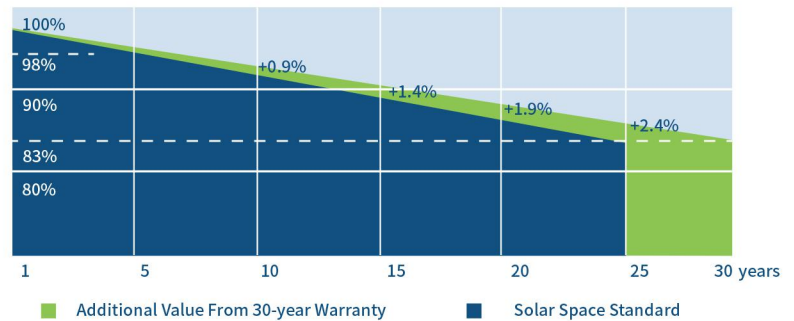
SATURN

MONOCRYSTAL PV MODULE SERIES

SS8-60HD 435-460M

30-YEAR LINEAR PERFORMANCE WARRANTY

● 12-year product warranty ● 30-year linear output power warranty



KEY FEATURES



10-busbar solar cell improves the efficiency of modules by decreasing the distance between busbars and finger grid line



Gallium-doped silicon cell technology makes PV module first year power degradation <2%



Half-cut cell technology to reduce hot spot risk



Bifacial technology enables additional energy harvesting from rear side



Optimized electrical design with lower operating current improves shading response

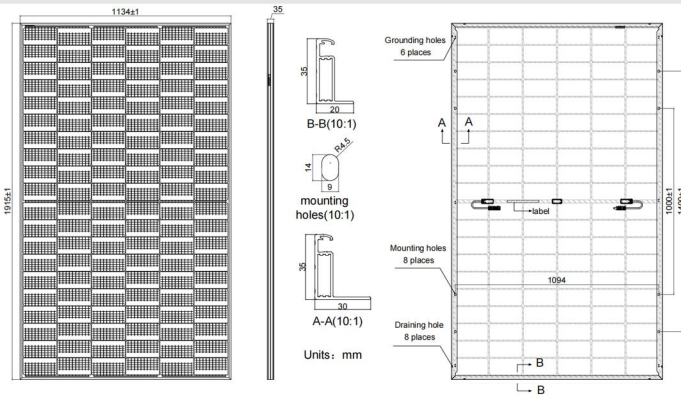


Advance glass and cell surface textured design ensure excellent performance in low-light environment.



Severe weather resilience: certified to withstand wind load(2400 pascal)and snowload(5400 pascal)

ENGINEERING DESIGN



Remark: customized frame color and cable length available upon request.

SPECIFICATIONS

Cell	Mono PERC
Weight	26.4kg±3%
Dimensions	1915X1134X35mm
Cable Diameter	4mm2(IEC),12AWG(UL)
No. of cells	120(6x20)
Junction Box	IP68, 3 diodes
Packaging	31 pcs/Pallet , 744 pcs/40ft container
Front Glass	2.0mm
Back Glass	2.0mm

ELECTRICAL PARAMETERS AT STC

	SS8-60HD -435M	SS8-60HD -440M	SS8-60HD -445M	SS8-60HD -450M	SS8-60HD -455M	SS8-60HD -460M
Module Type	-435M	-440M	-445M	-450M	-455M	-460M
Rated Maximum Power (Pmax) [W]	435	440	445	450	455	460
Open Circuit Voltage (Voc) [V]	40.96	41.08	41.21	41.33	41.46	41.58
Maximum Power Voltage (Vmp) [V]	34.12	34.33	34.50	34.67	34.87	35.07
Short Circuit Current (Isc) [A]	13.63	13.71	13.79	13.87	13.94	14.01
Maximum Power Current (Imp) [A]	12.75	12.82	12.90	12.98	13.05	13.12
Module Efficiency[%]	20.03%	20.26%	20.49%	20.72%	20.95%	21.18%
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(a_Isc)	+0.044%/°C					
Temperature Coefficient of Voc (β-Voc)	-0.272%/°C					
Temperature Coefficient of Pmax (Y_Pmp)	-0.350%/°C					

STC

Irradiance 1000W/m², cell temperature 25°C, AM1.5G

Remark: Electrical data in this catalog do refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

ELECTRICAL SPECIFICATIONS (Reference to 440W)

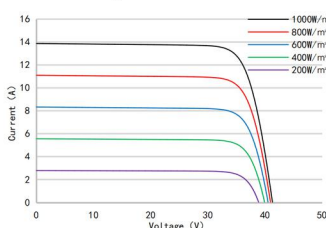
	5%	10%	15%	20%	25%
Power gain	5%	10%	15%	20%	25%
Rated Max Power (Pmax) [W]	462	484	506	528	550
Open Circuit Voltage (Voc) [V]	41.1	41.1	41.2	41.2	41.2
Max Power Voltage (Vmp) [V]	34.3	34.3	34.4	34.4	34.4
Short Circuit Current (Isc) [A]	14.40	15.08	15.77	16.45	17.14
Max Power Current (Imp) x [A]	13.47	14.11	14.74	15.35	15.99

OPERATING CONDITIONS

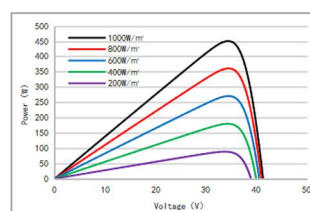
Max System Voltage	1500V DC (IEC)
Operating Temperature	-40°C ~ +85°C
Max Series Fuse Rating	25A
Max Static Load, Front	5400Pa
Max Static Load, Back	2400Pa
NOCT	45±2°C
Bifaciality	70±10%
Bifaciality=Pmax, rear/Rated Pmax, front	

CHARACTERISTICS

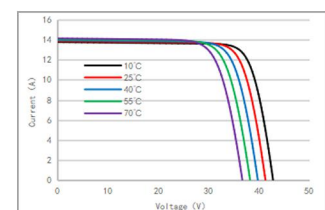
Current-Voltage Curve SS8-60HD -450M



Power-Voltage Curve SS8-60HD -450M



Current-Voltage Curve SS8-60HD -450M



STC: Irradiance 1000W/m² Cell Temperature 25°C AM 1.5G

NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM1.5G Wind Speed 1m/s