SEAFOREST 156N Series

Bifacial High Efficiency
Monocrystalline Silicon Half-Cell Double Glass Module

ELECTRICAL PROPERTIES | STC*

Module Type	156N-425	156N-430	156N-435	156N-440	156N-445	156N-450
Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	425	430	435	440	445	450
MPP Voltage (Vmp) (V)	44.5	44.8	45.2	45.5	45.8	46.1
MPP Current (Imp) (A)	9.56	9.60	9.64	9.68	9.72	9.77
Open Circuit Voltage (Voc) (V)	53.2	53.5	53.8	54.1	54.4	54.7
Short Circuit Current (Isc) (A)	10.01	10.06	10.12	10.17	10.22	10.28
Module Efficiency (%)	19.57	19.80	20.03	20.26	20.49	20.73

*STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5
The data above is for reference only and the actual data is in accordance with the pratical testing

ELECTRICAL PROPERTIES | NOCT*

Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	322	325	329	333	337	340
MPP Voltage (Vmp) (V)	41.7	42.0	42.3	42.6	43.0	43.2
MPP Current (Imp) (A)	7.71	7.74	7.77	7.80	7.84	7.88
Open Circuit Voltage (Voc) (V)	50.8	51.1	51.4	51.7	52.0	52.3
Short Circuit Current (Isc) (A)	8.07	8.11	8.16	8.20	8.24	8.29

*NOCT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s

OPERATING PROPERTIES >

Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage (V)	1500V (IEC)
Maximum Series Fuse Rating(A)	20
Power Tolerance	0~+5W
Bifaciality*	80%

*Bifaciality= Pmaxrear (STC) /Pmaxfront (STC) , Bifaciality tolerance:±5%

TEMPERATURE COEFFICIENT >

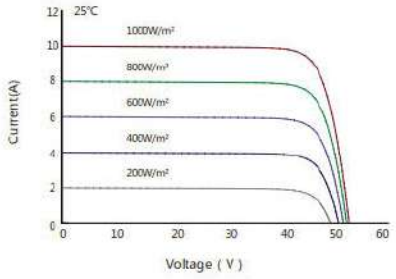
Temperature Coefficient of Pmax*	-0.32%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	+0.046%/°C
Nominal Operating Cell Temperature (NOCT)	42±2°C

*Temperature Coefficient of Pmax:0.03%/°C

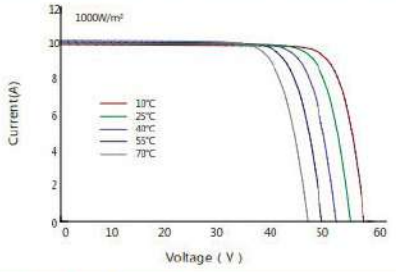
MECHANICAL PROPERTIES >

Cell Type	158.75mm*79.375mm
Number of Cells	156pcs(12*13)
Dimension	2180mm*996mm*30mm
Weight	32.5Kg
Front/Rear Glass	2.5mm/2.5mm
Frame	Anodized Aluminium
Junction Box	IP67 (3 diodes)
Length of Cable	4.0mm² , 300mm
Connector	MC4 Compatible

Irradiance Dependence of Isc, Voc and Pmax >



Temperature Dependence of Isc, Voc and Pmax >



With Different Power Generation Gain (regarding 440W as an example) >

Power Gain (%)	Peak Power (Pmax) (W)	MPP Voltage (Vmp) (V)	MPP Current (Imp) (A)	Open Circuit Voltage (Voc) (V)	Short Circuit Current (Isc) (A)
10	475	45.5	10.44	54.1	10.97
15	493	45.5	10.82	54.1	11.37
20	510	45.6	11.20	54.2	11.77
25	528	45.6	11.58	54.2	12.17
30	546	45.6	11.96	54.2	12.57

Packaging Configuration >

Packing Type	20'GP	40'GP	40'HQ
Piece/Pallet		35	
Pallet/Container	5	10	20
Piece/Container	175	350	700