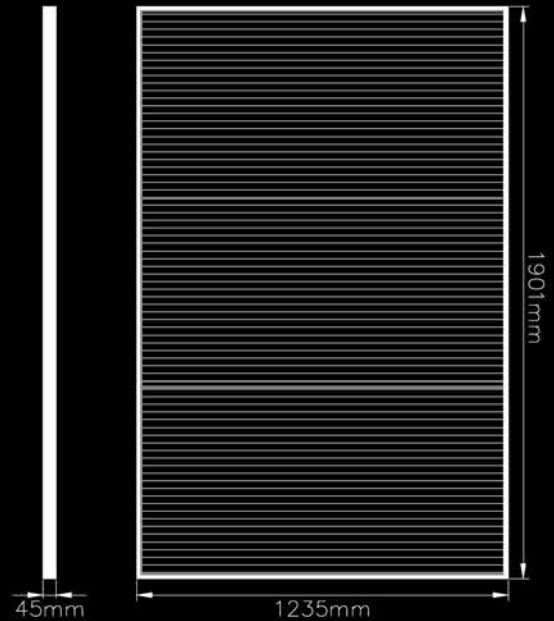
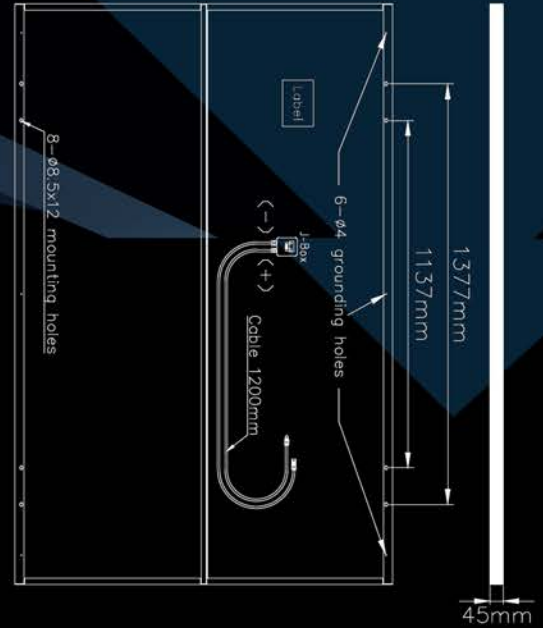


Mechanical Specification

Dimensions	1901mm x 1235mm x 45mm (74.8inches x 48.6inches x 1.8 inches)
Weight	33.3kg (73.41lbs)
Cell type	CIGS thin film
Front cover	2.5mm tempered glass
Cell substrates	1.8mm ultra-thin soda lime glass x 3
Back cover	Al back sheet
Encapsulant	EVA
Frame	Anodized Al frame (black) with screw mounting
Junction box	IP67 rated with bypass diode
Connectors	MC4 compatible
Cable length	1200mm (47.2inches)

Module Drawing



Electrical Specification

Power performance at STC (STC: 1000W/cm², 25°C/77°F, AM1.5)*

Module models	Cigs-	3050E1	3100E1	3150E1	3200E1
Maximum power	P _{MPP} [W]	305	310	315	320
Power tolerance	[W]	+5.0/-0	+5.0/-0	+5.0/-0	+5.0/-0
Open circuit voltage	V _{OC} [V]	75.1	75.3	75.4	75.6
Short circuit current	I _{SC} [A]	5.97	5.99	6.01	6.04
Voltage at Pmax	V _{MPP} [V]	58.4	58.7	59.0	59.3
Current at Pmax	I _{MPP} [A]	5.22	5.28	5.34	5.40
Module efficiency	[%]	≥13.0	≥13.2	≥13.4	≥13.6

Power performance at NOCT (NOCT: 800W/cm², 20°C/68°F, AM1.5)*

Module models	Cigs-	3050E1	3100E1	3150E1	3200E1
Maximum power	P _{MPP} [W]	244.3	248.6	253.0	257.4
Open circuit voltage	V _{OC} [V]	74.6	74.9	75.1	75.2
Short circuit current	I _{SC} [A]	4.77	4.79	4.81	4.83
Voltage at Pmax	V _{MPP} [V]	59.1	59.4	59.7	59.9
Current at Pmax	I _{MPP} [A]	4.13	4.19	4.24	4.29

*All STC characteristics are measured after pre-treatment of 43kWh/m² light soaking.
Accuracy: (P_{MPP}: ±5%; I_{SC}, V_{OC}, I_{MPP}, V_{MPP}: ±10%)

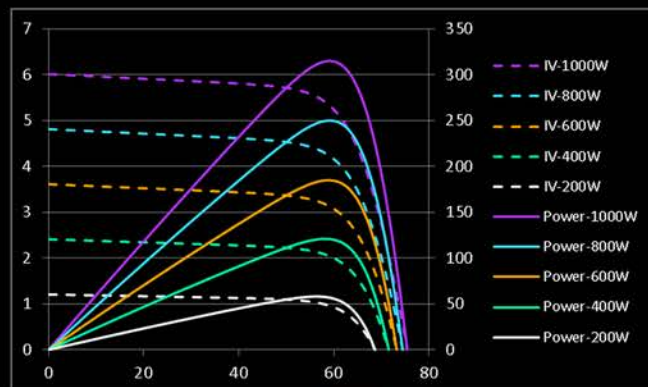
Temperature coefficients (At 1000W/m², AM1.5)

Temp. coefficient of short circuit current	Temp. coefficient of open circuit voltage	Temp. coefficient of maximum power
α	β	δ
+0.01%/°C	-0.31%/°C	-0.23%/°C

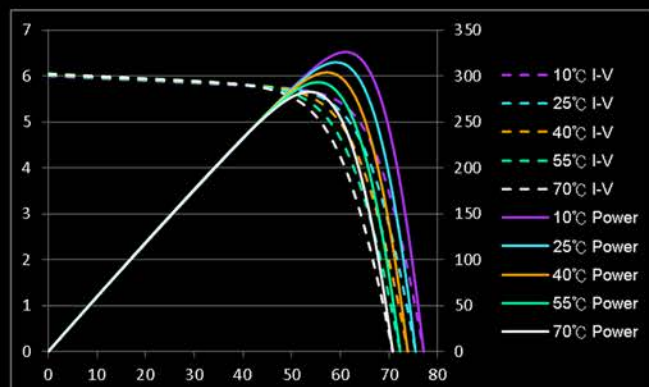
Properties for solar system construction design

Max. system voltage (V _{sys})	Max. series overcurrent protective devices	Mechanical load	Safety class	Fire rating	Operating temperature
1000V	8A	5400Pa	II	C	-40 ~ 85°C

I-V curves at various irradiation



I-V curves at various temperature



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