

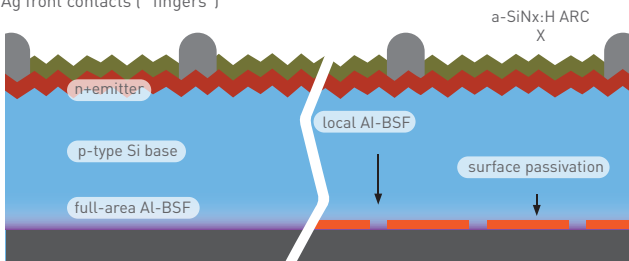
Ultra High Efficiency Solar Module

PERC SOLAR CELL

PERC Solar Cell

- The mono cell technology with Passivated backside and local BSF
- Proprietary Laser Pattern Design Superior AlOx layer Passivation

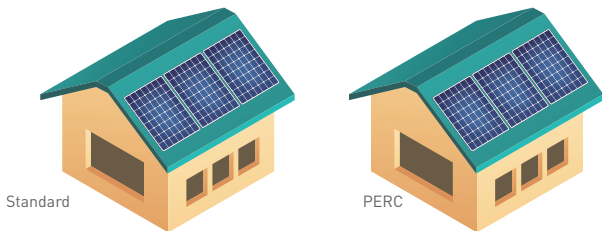
Ag front contacts ("fingers")



Al rear contact

More Power Per m²

10% more power production per unit area



Benefit: 10% More Power

+10% PERC module 290W VS Standard module 265W

Lower System Cost

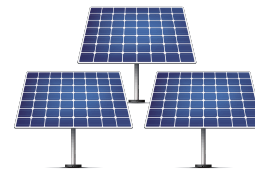
Benefit: Save System Costs Per Watt



Transportation cost

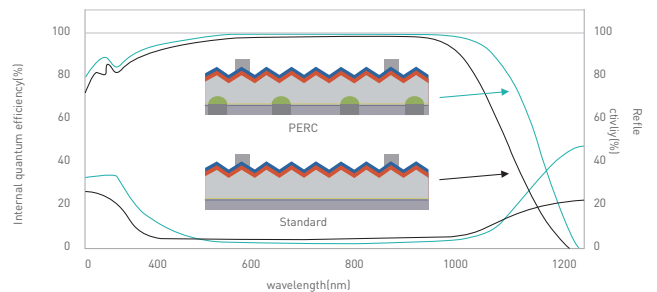


Installation cost



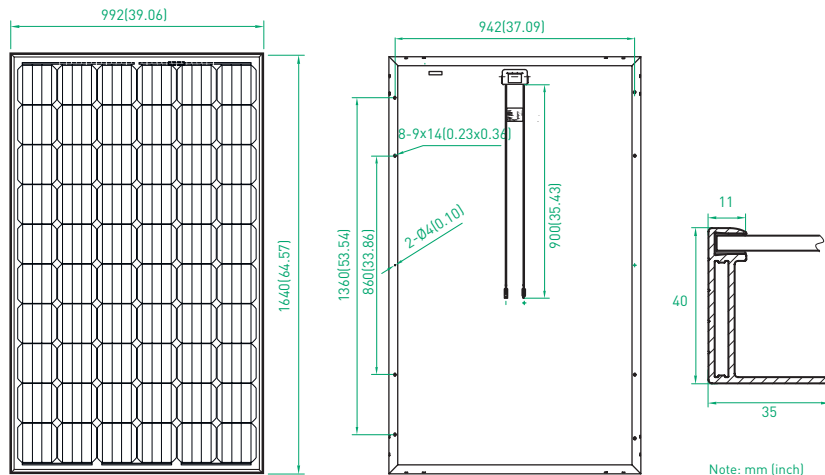
BOS cost

Excellent Low-light Performance



ULTRA HIGH EFFICIENCY SOLAR MODULES **285-300W** MONO

DIMENSIONS



Note: mm (inch)



MECHANICAL CHARACTERISTICS

Solar Cells	Monocrystalline 156mm x 156mm square, 6 x 10 pieces in series
Dimension	Length: 1640mm (64.6 inch)
	Width: 992mm (39.1 inch)
	Height: 40mm (1.6 inch)
Weight	19kg (41.9 lbs)
Front Glass	3.2mm toughened glass
Frame	Anodized aluminium alloy
Cable	4mm ² (IEC) / 12AWG (UL), 900mm
Junction Box	IP 68 rated

ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
Maximum Series Fuse Rating	15A
IEC Application Class (IEC61730)	A
Fire Rating (IEC61730)	C
Module Fire Performance (UL1703)	Type 1
Maximum System Voltage	DC 1000V (IEC)
	DC 600V (UL) / 1000V (ETL)

ELECTRICAL TYPICAL VALUES^[1]

Model	Rated Power (P _{mpp})	Tolerance	Rated Current (I _{mpp})	Rated Voltage (V _{mpp})	Short Circuit Current (I _{sc})	Open Circuit Voltage (V _{oc})	Module Efficiency (%)
PS285M-20/U	285W	0~+5W	9.23A	30.9V	9.67A	39.6V	17.51
PS290M-20/U	290W	0~+5W	9.29A	31.2V	9.73A	39.7V	17.83
PS295M-20/U	295W	0~+5W	9.34A	31.6V	9.79A	39.8V	18.13
PS300M-20/U	300W	0~+5W	9.4A	31.9V	9.85A	39.9V	18.44

WEAK LIGHT PERFORMANCE

Intensity [W/m ²]	I _{mpp}	V _{mpp}
1000	1.0	1.000
800	0.8	0.996
600	0.6	0.990
400	0.4	0.983
200	0.2	0.952
100	0.1	0.921

TEMPERATURE CHARACTERISTICS

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Voltage Temperature Coefficient	-0.35%/k
Current Temperature Coefficient	+0.07%/k
Power Temperature Coefficient	-0.45%/k

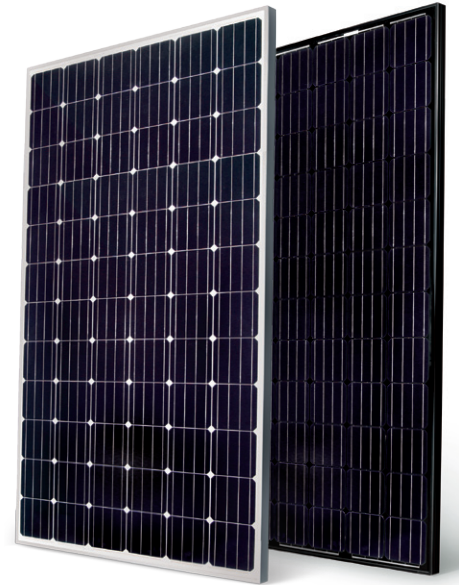
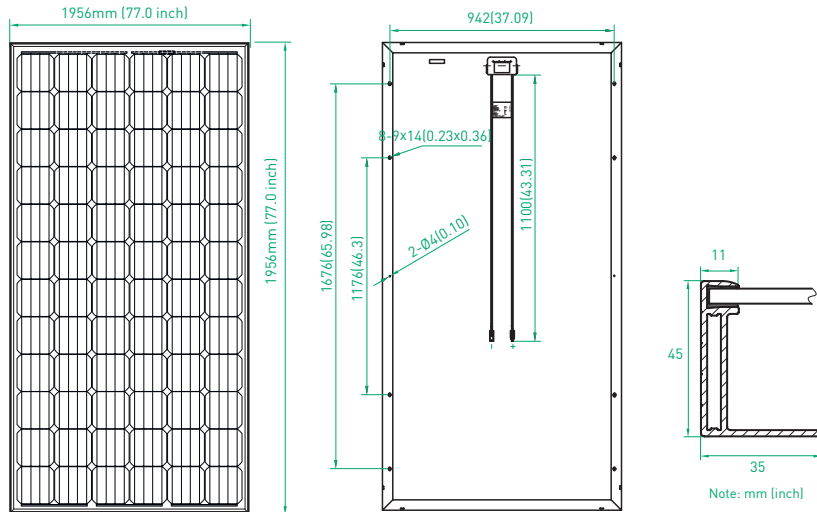
PACKING CONFIGURATION

Container	40' HQ	20' GP
Pieces per container	728	264

1. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m², Air mass 1.5 Spectrum, cell temperature of 25°C.

ULTRA HIGH EFFICIENCY SOLAR MODULES **345-360W** MONO

DIMENSIONS



MECHANICAL CHARACTERISTICS

Solar Cells	Monocrystalline 156mm x 156mm square, 6 x 12 pieces in series
Dimension	Length: 1956mm (77.0 inch)
	Width: 992mm (39.1 inch)
	Height: 45mm (1.8 inch)
Weight	24kg (52.9 lbs)
Front Glass	3.2mm toughened glass
Frame	Anodized aluminium alloy
Cable	4mm ² (IEC) / 12AWG (UL), 1100mm
Junction Box	IP 68 rated

ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
Maximum Series Fuse Rating	15A
IEC Application Class (IEC61730)	A
Fire Rating (IEC61730)	C
Module Fire Performance (UL1703)	Type 1
Maximum System Voltage	DC 1000V (IEC)
	DC 600V (UL) / 1000V (ETL)

ELECTRICAL TYPICAL VALUES^[1]

Model	Rated Power (P _{mpp})	Tolerance	Rated Current (I _{mpp})	Rated Voltage (V _{mpp})	Short Circuit Current (I _{sc})	Open Circuit Voltage (V _{oc})	Module Efficiency (%)
PS345M-24/T	345W	0→+5W	9.25A	37.3V	9.81A	46.8V	17.78
PS350M-24/T	350W	0→+5W	9.34A	37.5V	9.9A	47.0V	18.04
PS355M-24/T	355W	0→+5W	9.42A	37.7V	9.99A	47.2V	18.30
PS360M-24/T	360W	0→+5W	9.50A	37.9V	10.07A	47.4V	18.55

WEAK LIGHT PERFORMANCE

Intensity [W/m ²]	I _{mpp}	V _{mpp}
1000	1.0	1.000
800	0.8	0.996
600	0.6	0.990
400	0.4	0.983
200	0.2	0.952
100	0.1	0.921

TEMPERATURE CHARACTERISTICS

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Voltage Temperature Coefficient	-0.35%/k
Current Temperature Coefficient	+0.07%/k
Power Temperature Coefficient	-0.45%/k

PACKING CONFIGURATION

Container	40' HQ	20' GP
Pieces per container	576	200

1. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m², Air mass 1.5 Spectrum, cell temperature of 25°C.