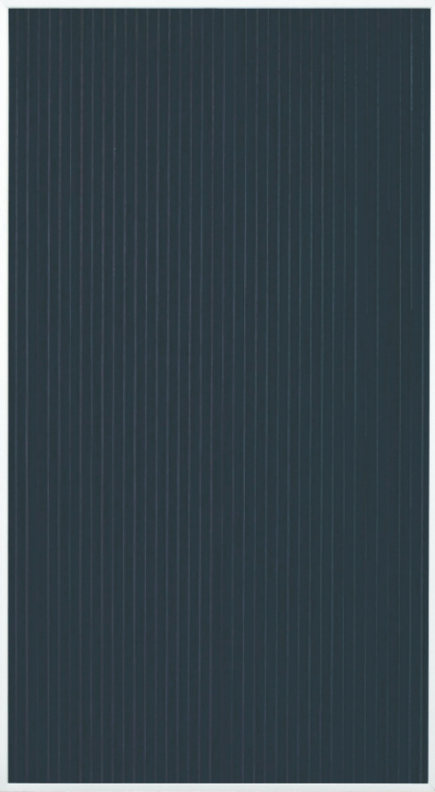




Amorn Electronic Center Spare Part

**SOLAR PHOTOVOLTAIC
MODULE**



About Shenzhen Topray Solar Co.,Ltd.

A public listed on China A-Share stock market with a market cap over 1 billion US DOLLAR. Vertically integrated to produce from glass, TEO glass, cell to the final modules. Three manufacturing plants in China with a total capacity of over 350MW. Three subsidiary company in Germany,USA and Africa which are serving customers with local warehousing and on time delivery, for the GERMANY WAREHOUSE, there are MW quantity of solar modules stocked.

MODULE FEATURES

Dual Junction Technology --- ensures less power degradation after light soaking period.

Edge Isolation Technology --- better- protection from severe weather conditions.

Competitive Cost per kwh --- shorter payback period when utilized to solar projects.

Performance Ensured --- Amorphous modules works best when partially shaded. Its lower temperature co-efficiency gives it better performances undrt various weather conditions in the long term.

GENREAL DATA

Cell Type	Amorphous Silicon Solar Cell
Glass	Ultra White Glass, Thickness 3.2mm
Frame	Frame less or aluminum frame
Junction Box	TÜV Certified, MC4 Connector
Cable Length (mm)	≥900

WORKING CONDITIONS

Maximum System Voltage	DC 600V
Maximum Series Fuse	1.5A
Static Loading	5400 Pa,(Advanced Test By IEC 61215)
NOCT(°c)	47+/-2
Operating Temperature(°c)	-48~85

MECHANICAL DATA AND PACKAGING

Weight(kg)	141
Dimensions(L X W X H)(mm)	1253X643X37
Cell Connections	37 in serial
No.of Diodes	None
Packing Configuration	20 PCS Per Carton
Loading Capacity	1080PCS/40FT

PRODUCT WARRANTY

24 mouths workmanship
20years,output ≥80%



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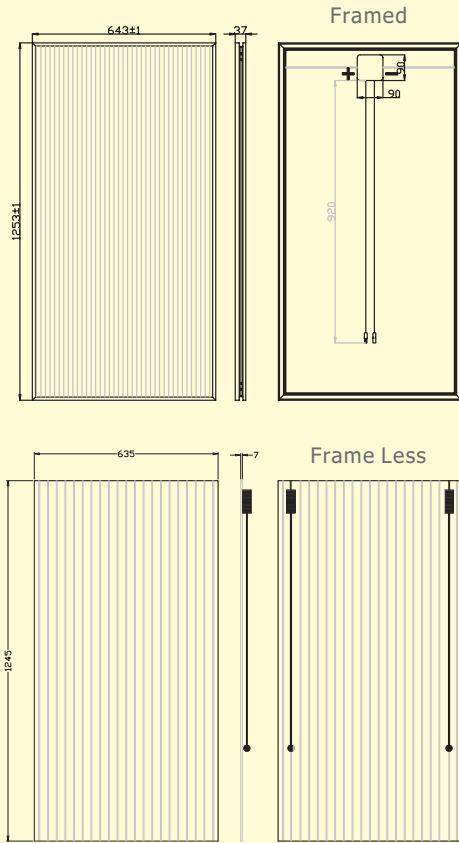
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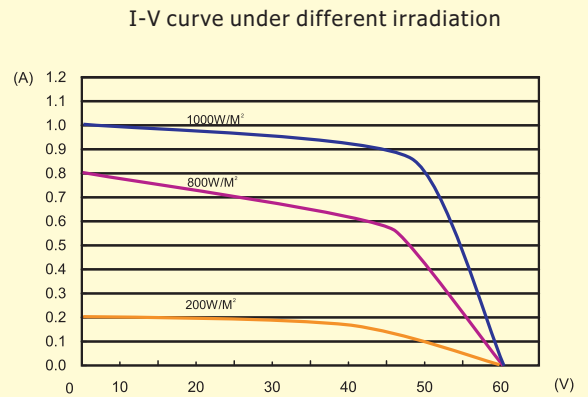
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Amorn Electronic Center Spare Part

SOLAR PHOTOVOLTAIC MODULE



I-V CURVE



SPECIFICATIONS

	TPS-113(40)	TPS-113(45)	TPS-113(50)	TPS-113(55)	TPS-113(60)
Maximum Power-Pmax(W)	40	45	50	55	60
Open Circuit Voltage-Voc(V)	61.00	61.00	61.00	61.00	61.00
Short Circuit Current-Isc(A)	1.00	1.12	1.20	1.24	1.26
Maximum Power Voltage-Vpm(V)	46.00	48.90	49.00	48.20	49.18
Maximum Power Current-Ipm(A)	0.87	0.92	1.02	1.14	1.22
Power Tolerance	+/-3%				
α Isc	0.09%/°C				
β Voc	-0.19%/°C				
γ Pm	-0.28%/°C				

VALUES @ STC (AM1.5, IRRADIANCE 1000W/m², CELL TEMPRATURE 25°C)



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