Constructional Data Form for Photovoltaic Modules

License Holder ..... : (full address)	Solartech Energy Corp. No. 16, Guangfu N. Rd., HUKOU TOWNSHIP, 303, HSINCHU COUNTY 303, TAIWAN, R.O.C.
Production Factory ..... : (full address)	Solartech Energy Corp. No. 16, Guangfu N. Rd., HUKOU TOWNSHIP, 303, HSINCHU COUNTY 303, TAIWAN, R.O.C.
Type of Product ..... :	Photovoltaic (PV) Modules
Trademark ..... :	or
Type Name or Model No..... :	**With 6" Poly cells:** SEC-6P-72-XXX (XXX=265-320, in steps of 5, 72 cells) SEC-6P-60-XXX (XXX=220-265, in steps of 5, 60 cells) SEC-6P-54-XXX (XXX=200-240, in steps of 5, 54 cells) SEC-6P-48-XXX (XXX=175-210, in steps of 5, 48 cells) SEC-6P-36-XXX (XXX=135-150, in steps of 5, 36 cells) SEC-6P-72-XXX-3BB (XXX=265-320, in steps of 5, 72 cells) SEC-6P-60-XXX-3BB (XXX=220-265, in steps of 5, 60 cells) SEC-6P-54-XXX-3BB (XXX=200-240, in steps of 5, 54 cells) SEC-6P-48-XXX-3BB (XXX=175-210, in steps of 5, 48 cells) SEC-6P-36-XXX-3BB (XXX=135-150, in steps of 5, 36 cells) **With 6" Mono cells:** SEC-6M-72-XXX (XXX=270-325, in steps of 5, 72 cells) SEC-6M-60-XXX (XXX=225-270, in steps of 5, 60 cells) SEC-6M-54-XXX (XXX=205-245, in steps of 5, 54 cells) SEC-6M-48-XXX (XXX=180-215, in steps of 5, 48 cells) SEC-6M-36-XXX (XXX=135-160, in steps of 5, 36 cells) SEC-6M-72-XXX-3BB (XXX=270-325, in steps of 5, 72 cells) SEC-6M-60-XXX-3BB (XXX=225-270, in steps of 5, 60 cells) SEC-6M-54-XXX-3BB (XXX=205-245, in steps of 5, 54 cells) SEC-6M-48-XXX-3BB (XXX=180-215, in steps of 5, 48 cells) SEC-6M-36-XXX-3BB (XXX=135-160, in steps of 5, 36 cells)
Maximum System Voltage [VDC] :	1000
Tolerance of Rating [%] ..... :	±3
Over-current protection rating [A]:	15
Application Class (IEC 61730)..... :	Class A
Protection Class ..... :	Class II

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Date Name Signature

Solartech Energy Corp.

Date Name Stamp or Signature of License Holder

Constructional Data Form for Photovoltaic Modules

Electrical rating for type	**SEC-6P-72-XXX** (XXX=265-320, in steps of 5, 72 cells)		**SEC-6P-60-XXX** (XXX=220-265, in steps of 5, 60 cells)	**SEC-6P-54-XXX** (XXX=200-240, in steps of 5, 54 cells)
Rated Maximum Power [W]	265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320		220, 225, 230, 235, 240, 245, 250, 255, 260, 265	200, 205, 210, 215, 220, 225, 230, 235, 240
Rated Short Circuit Current [A]	8.05, 8.09, 8.20, 8.31, 8.41, 8.52, 8.58, 8.63, 8.67, 8.70, 8.72, 8.76		8.06, 8.17, 8.25, 8.35, 8.48, 8.61, 8.70, 8.78, 8.80, 8.84	8.17, 8.25, 8.35, 8.48, 8.61, 8.70, 8.78, 8.85, 8.90
Rated Open Circuit Voltage [V]	43.70, 43.85, 44.00, 44.15, 44.32, 44.46, 44.68, 44.82, 44.96, 45.18, 45.32, 45.50		36.54, 36.80, 37.34, 37.50, 37.82, 38.00, 38.22, 38.45, 38.68, 38.89	32.72, 33.22, 33.62, 33.90, 34.07, 34.25, 34.55, 34.80, 35.15
Dimensions (l x w x h) [mm]	1960x992x46, 1960x992x40	1970x992x46, 1970x992x40	1653x992x46, 1653x992x40	1495x992x46, 1495x992x40
Module area [m²]	1.94	1.95	1.64	1.48
Min- creepage distance [mm]	16.5	16.5	17.0	17.0
Electrical rating for type	**SEC-6P-48-XXX** (XXX=175-210, in steps of 5, 48 cells)	**SEC-6P-36-XXX** (XXX=135-150, in steps of 5, 36 cells)	**SEC-6P-72-XXX-3BB** (XXX=265-320, in steps of 5, 72 cells)	
Rated Maximum Power [W]	175, 180, 185, 190, 195, 200, 205, 210	135, 140, 145, 150	265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320	
Rated Short Circuit Current [A]	8.17, 8.25, 8.35, 8.48, 8.61, 8.70, 8.81, 8.90	8.30, 8.47, 8.62, 8.75	8.02, 8.09, 8.22, 8.33, 8.41, 8.52, 8.58, 8.62, 8.68, 8.70, 8.72, 8.76	
Rated Open Circuit Voltage [V]	28.64, 29.17, 29.62, 29.95, 30.28, 30.50, 30.83, 31.12	21.75, 22.10, 22.49, 22.63	43.55, 43.85, 44.00, 44.15, 44.32, 44.46, 44.68, 44.75, 44.83, 45.18, 45.32, 45.50	
Dimensions (l x w x h) [mm]	1336x992x46, 1336x992x40	1019x992x46, 1019x992x40	1960x992x46, 1960x992x40	1970x992x46, 1970x992x40
Module area [m²]	1.33	1.01	1.94	1.95
Min- creepage distance [mm]	16.5	16.5	16.5	
Electrical rating for type	**SEC-6P-60-XXX-3BB** (XXX=220-265, in steps of 5, 60 cells)	**SEC-6P-54-XXX-3BB** (XXX=200-240, in steps of 5, 54 cells)	**SEC-6P-48-XXX-3BB** (XXX=175-210, in steps of 5, 48 cells)	**SEC-6P-36-XXX-3BB** (XXX=135-150, in steps of 5, 36 cells)
Rated Maximum Power [W]	220, 225, 230, 235, 240, 245, 250, 255, 260, 265	200, 205, 210, 215, 220, 225, 230, 235, 240	175, 180, 185, 190, 195, 200, 205, 210	135, 140, 145, 150
Rated Short Circuit Current [A]	8.06, 8.17, 8.25, 8.35, 8.48, 8.61, 8.64, 8.66, 8.70, 8.73	8.17, 8.25, 8.35, 8.48, 8.61, 8.65, 8.68, 8.70, 8.72	8.17, 8.25, 8.35, 8.48, 8.61, 8.63, 8.66, 8.70	8.30, 8.47, 8.62, 8.63
Rated Open Circuit Voltage [V]	36.54, 36.80, 37.34, 37.50, 37.82, 38.00, 38.12, 38.20, 38.28, 38.40	32.72, 33.22, 33.62, 33.90, 34.07, 34.10, 34.13, 34.22, 34.45	28.64, 29.17, 29.62, 29.95, 30.28, 30.30, 30.36, 30.50	21.75, 22.10, 22.49, 22.51
Dimensions (l x w x h) [mm]	1653x992x46, 1653x992x40	1495x992x46, 1495x992x40	1336x992x46, 1336x992x40	1019x992x46, 1019x992x40
Module area [m²]	1.64	1.48	1.33	1.01
Min- creepage distance [mm]	16.5	17.0	16.5	16.5

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Date Name Signature

Solartech Energy Corp.

Date Name Stamp or Signature of License Holder

Constructional Data Form for Photovoltaic Modules

Electrical rating for type	**SEC-6M-72-XXX** (xxx=270-325, in steps of 5, 72 cells)		**SEC-6M-60-XXX** (xxx=225-270, in steps of 5, 60 cells)	**SEC-6M-54-XXX** (xxx=205-245, in steps of 5, 54 cells)
Rated Maximum Power [W]	270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325		225, 230, 235, 240, 245, 250, 255, 260, 265, 270	205, 210, 215, 220, 225, 230, 235, 240, 245
Rated Short Circuit Current [A]	8.40, 8.50, 8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90, 8.90, 9.00		8.50, 8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90, 8.90	8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90, 8.90
Rated Open Circuit Voltage [V]	43.20, 43.50, 43.80, 44.10, 44.40, 44.70, 45.00, 45.40, 45.70, 46.00, 46.30, 46.60		35.90, 36.20, 36.50, 36.80, 37.10, 37.40, 37.90, 38.20, 38.50, 38.80	32.50, 32.80, 33.10, 33.40, 33.70, 34.10, 34.40, 34.70, 35.00
Dimensions (l x w x h) [mm]	1960x992x46, 1960x992x40	1970x992x46, 1970x992x40	1653x992x46, 1653x992x40	1495x992x46, 1495x992x40
Module area [m²]	1.94	1.95	1.64	1.48
Min- creepage distance [mm]	16.5		16.5	17.0
Electrical rating for type	**SEC-6M-48-XXX** (xxx=180-215, in steps of 5, 48 cells)	**SEC-6M-36-XXX** (xxx=135-160, in steps of 5, 36 cells)	**SEC-6M-72-XXX-3BB** (xxx=270-325, in steps of 5, 72 cells)	
Rated Maximum Power [W]	180, 185, 190, 195, 200, 205, 210, 215	135, 140, 145, 150, 155, 160	270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325	
Rated Short Circuit Current [A]	8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90	8.70, 8.70, 8.80, 8.80, 8.90, 8.90	8.40, 8.50, 8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90, 8.90, 9.00	
Rated Open Circuit Voltage [V]	28.00, 28.80, 29.20, 29.60, 30.00, 30.40, 30.80, 31.20	21.60, 21.90, 22.20, 22.50, 22.80, 23.10	43.20, 43.50, 43.80, 44.10, 44.40, 44.70, 45.00, 45.40, 45.70, 46.00, 46.30, 46.60	
Dimensions (l x w x h) [mm]	1336x992x46, 1336x992x40	1019x992x46, 1019x992x40	1960x992x46, 1960x992x40	1970x992x46, 1970x992x40
Module area [m²]	1.33	1.01	1.94	1.95
Min- creepage distance [mm]	16.5	16.5	16.5	
Electrical rating for type	**SEC-6M-60-XXX-3BB** (xxx=225-270, in steps of 5, 60 cells)	**SEC-6M-54-XXX-3BB** (xxx=205-245, in steps of 5, 54 cells)	**SEC-6M-48-XXX-3BB** (xxx=180-215, in steps of 5, 48 cells)	**SEC-6M-36-XXX-3BB** (xxx=135-160, in steps of 5, 36 cells)
Rated Maximum Power [W]	225, 230, 235, 240, 245, 250, 255, 260, 265, 270	205, 210, 215, 220, 225, 230, 235, 240, 245	180, 185, 190, 195, 200, 205, 210, 215	135, 140, 145, 150, 155, 160
Rated Short Circuit Current [A]	8.50, 8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90, 8.90	8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90, 8.90	8.50, 8.60, 8.60, 8.70, 8.70, 8.80, 8.80, 8.90	8.70, 8.70, 8.80, 8.80, 8.90, 8.90
Rated Open Circuit Voltage [V]	35.90, 36.20, 36.50, 36.80, 37.10, 37.40, 37.90, 38.20, 38.50, 38.80	32.50, 32.80, 33.10, 33.40, 33.70, 34.10, 34.40, 34.70, 35.00	28.00, 28.80, 29.20, 29.60, 30.00, 30.40, 30.80, 31.20	21.60, 21.90, 22.20, 22.50, 22.80, 23.10
Dimensions (l x w x h) [mm]	1653x992x46, 1653x992x40	1495x992x46, 1495x992x40	1336x992x46, 1336x992x40	1019x992x46, 1019x992x40
Module area [m²]	1.64	1.48	1.33	1.01
Min- creepage distance [mm]	16.5	17.0	16.5	16.5

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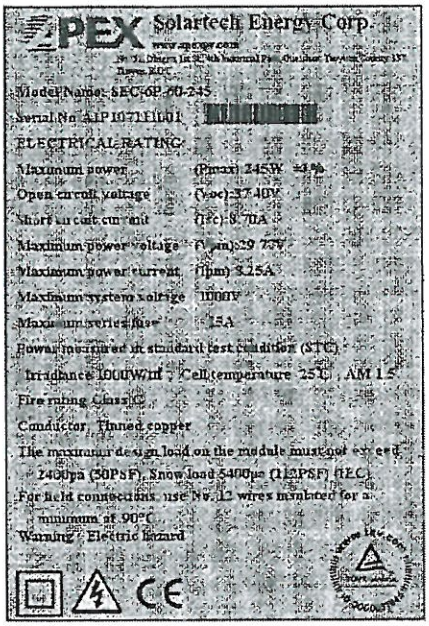
Date Name Signature

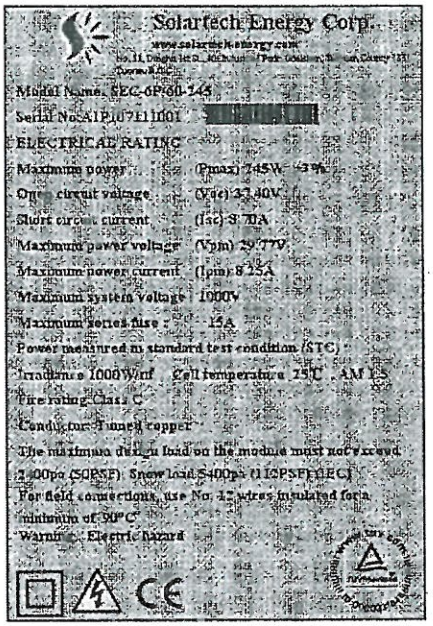
Solartech Energy Corp.

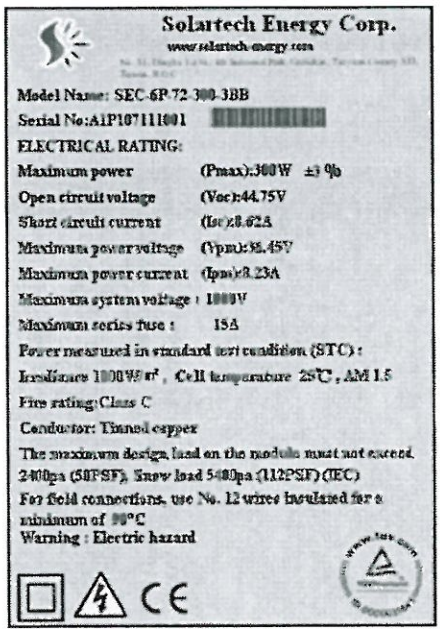
Date Name Stamp or Signature of License Holder

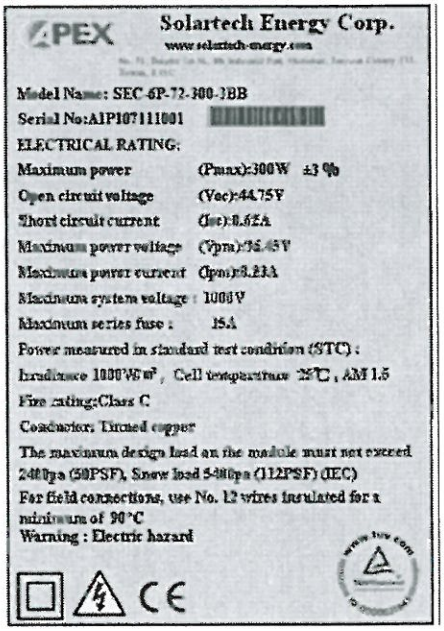
Constructional Data Form for Photovoltaic Modules

Copy of marking plate:









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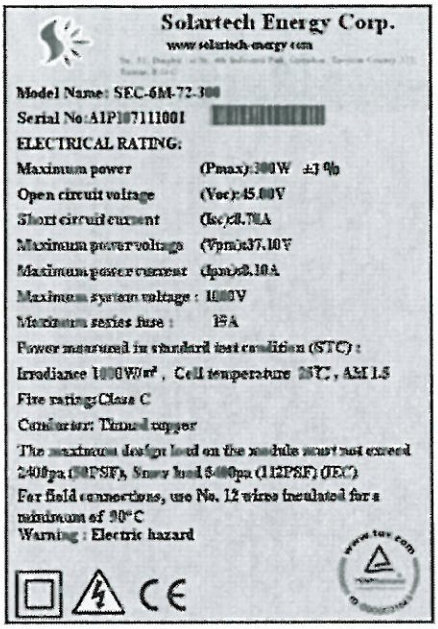
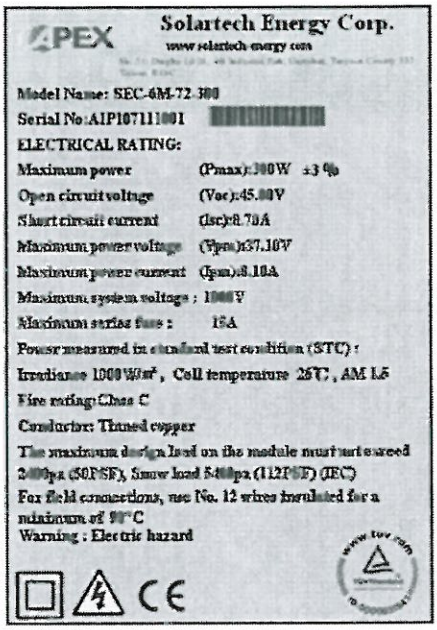
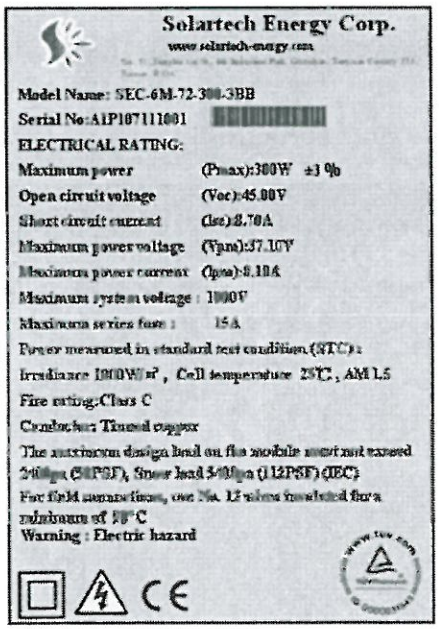
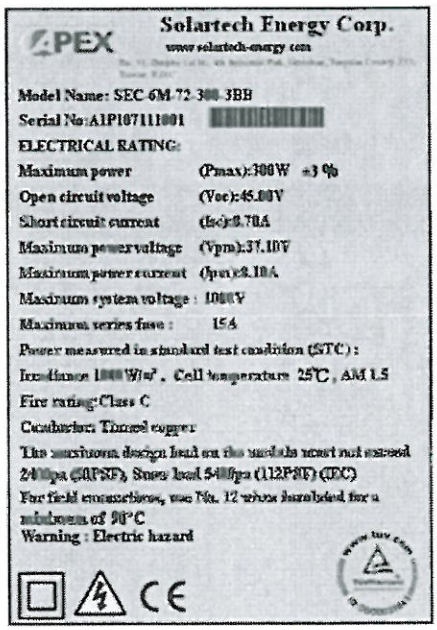

Solartech Energy Corp.
www.solartech-energy.com
Model Name: SEC-6M-72-300
Serial No:A1P107111001 [redacted]
ELECTRICAL RATING:
Maximum power (Pmax):300W ±3 %
Open circuit voltage (Voc):45.00V
Short circuit current (Isc):8.70A
Maximum power voltage (Vpm):37.10V
Maximum power current (Ipm):8.10A
Maximum system voltage : 1000V
Maximum series fuse : 15A
Power measured in standard test condition (STC) :
Irradiance 1000W/m², Cell temperature 25℃, AM 1.5
Fire rating:Class C
Conductor: Tinned copper
The maximum design load on the module must not exceed 2400pa (50PSF), Snow load 5400pa (112PSF) (IEC)
For field connections, use No. 12 wires insulated for a minimum of 90°C
Warning : Electric hazard


Solartech Energy Corp.
www.solartech-energy.com
Model Name: SEC-6M-72-300
Serial No:A1P107111001 [redacted]
ELECTRICAL RATING:
Maximum power (Pmax):300W ±3 %
Open circuit voltage (Voc):45.00V
Short circuit current (Isc):8.70A
Maximum power voltage (Vpm):37.10V
Maximum power current (Ipm):8.10A
Maximum system voltage : 1000V
Maximum series fuse : 15A
Power measured in standard test condition (STC) :
Irradiance 1000W/m², Cell temperature 25℃, AM 1.5
Fire rating:Class C
Conductor: Tinned copper
The maximum design load on the module must not exceed 2400pa (50PSF), Snow load 5400pa (112PSF) (IEC)
For field connections, use No. 12 wires insulated for a minimum of 90°C
Warning : Electric hazard


Solartech Energy Corp.
www.solartech-energy.com
Model Name: SEC-6M-72-300-3BB
Serial No:A1P107111001 [redacted]
ELECTRICAL RATING:
Maximum power (Pmax):300W ±3 %
Open circuit voltage (Voc):45.00V
Short circuit current (Isc):8.70A
Maximum power voltage (Vpm):37.10V
Maximum power current (Ipm):8.10A
Maximum system voltage : 1000V
Maximum series fuse : 15A
Power measured in standard test condition (STC) :
Irradiance 1000W/m², Cell temperature 25℃, AM 1.5
Fire rating:Class C
Conductor: Tinned copper
The maximum design load on the module must not exceed 2400pa (50PSF), Snow load 5400pa (112PSF) (IEC)
For field connections, use No. 12 wires insulated for a minimum of 90°C
Warning : Electric hazard


Solartech Energy Corp.
www.solartech-energy.com
Model Name: SEC-6M-72-300-3BB
Serial No:A1P107111001 [redacted]
ELECTRICAL RATING:
Maximum power (Pmax):300W ±3 %
Open circuit voltage (Voc):45.00V
Short circuit current (Isc):8.70A
Maximum power voltage (Vpm):37.10V
Maximum power current (Ipm):8.10A
Maximum system voltage : 1000V
Maximum series fuse : 15A
Power measured in standard test condition (STC) :
Irradiance 1000W/m², Cell temperature 25℃, AM 1.5
Fire rating:Class C
Conductor: Tinned copper
The maximum design load on the module must not exceed 2400pa (50PSF), Snow load 5400pa (112PSF) (IEC)
For field connections, use No. 12 wires insulated for a minimum of 90°C
Warning : Electric hazard

Marking plate is in compliance with EN 50380:2003

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Date Name Signature

Solartech Energy Corp.

Date Name Stamp or Signature of License Holder

Constructional Data Form for Photovoltaic Modules

List of Critical Components (add lines for multiple material sources)

Object	*Ref. code	Manufacturer / trademark	Type / model	Technical data / ratings	Standard (if applicable)	Certificates (if applicable)
Front cover	G1	Stanley Glass	Tempered Glass	Thickness = 3.2 mm Process: Tempered Glass	N/A	N/A
Front cover***	G2	Stanley Glass	Tempered Glass	Thickness = 3.2 mm Process: Tempered with AR Coating glass	N/A	N/A
Front cover	G3	Flat Glass Group. (FMG)	Suntex / Low iron	Thickness: 3.2 mm Process: Tempered Glass	N/A	N/A
Front cover	G4	Flat Glass Group. (FMG)	Suntex / Low iron	Thickness: 3.2 mm Process: Tempered with AR Coating glass	N/A	N/A
Front cover	G5	Xinyi Solar Glass	Low iron solar glass	Thickness: 3.2 mm Process: Tempered Glass	N/A	N/A
Front cover	G6	Xinyi Solar Glass	Low iron solar glass	Thickness: 3.2 mm Process: Tempered with AR Coating glass	N/A	N/A
Front cover**	G7	TAIYUE Glass	solar glass / Low-iron extra-clear patterned glass	Thickness: 3.2 mm Process: Tempered Glass	N/A	N/A
Front cover***	G8	TAIYUE Glass	solar glass / Anti reflection coating glass	Thickness: 3.2 mm Process: Tempered with AR Coating glass	N/A	N/A
Rear cover	B1	Coveme SPA	dyMat PYE	Material: PET/Adhesive/PET/ Adhesive/EVA Thickness: 295 µm RTI: 105 °C	IEC 60664-1	21209108
Rear cover**	B2	3M	3M™ Scotchshield™ Film 15T Black	Material: Fluorthermoplast/PET /EVA Thickness: 300 µm RTI: 105 °C Color: Black	IEC 60664-1	21214914
Rear cover**	B3	3M	3M™ Scotchshield™ Film 15T	Material: Fluorthermoplast/PET /EVA Thickness: 300 µm RTI: 105 °C Color: White	IEC 60664-1	21211649
Encapsulation material	E1	Bridgestone	S-11 Series	Material: EVA Thickness: 460 µm	N/A	N/A
Encapsulation material**	E2	Sanvic	Ultra Pearl PV 45FR	Material: EVA Thickness: 450 µm	N/A	N/A
Frame parts	F1	Sheng Hua Metal	N/A	Materal: Aluminum 6063-T5 Color: Silver, Black	N/A	N/A
Frame parts	F2	Ad Infinitum Industry	N/A	Material: Aluminum 6063-T5 Color: Silver, Black	N/A	N/A
Frame parts	F3	Hanlong new energy technology	N/A	Material: Aluminum 6063-T5 Color: Silver, Black	N/A	N/A
Frame parts	F4	SAPA	N/A	Material: Aluminum 6063-T5 Color: Silver, Black	N/A	N/A

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Constructional Data Form for Photovoltaic Modules

Frame parts**	F5	YIHSHENG	N/A	Material: Aluminum 6063-T5 Color: Silver, Black	N/A	N/A
Frame parts***	F6	AKCOME	N/A	Material: Aluminum 6063-T5 Color: Silver, Black	N/A	N/A
Edge sealing or adhesive (frame)	S1	3M	2080	Material: Acrylic foam with Acrylic adhesive	N/A	N/A
Edge sealing or adhesive (frame)**	S2	3M	9R110G	Material: PE	N/A	N/A
Solar cell	C1	Solartech Energy Corp.	M-156-2	Material: Multi-crystalline Cell dimensions=156X156 mm Thickness = 200 ± 30 µm Busbar no.: 2 Busbar dimemsions: Front: 1.8 mm Back: 3.5 mm	N/A	N/A
Solar cell**	C2	Solartech Energy Corp.	M-156-3	Material: Multi-crystalline Cell dimensions=156X156 mm Thickness = 200 ± 30 µm Busbar no.: 3 Busbar dimemsions: Front: 1.5 mm Back: 3.0 mm	N/A	N/A
Solar cell**	C3	Solartech Energy Corp.	S-156-2	Material: Mono-crystalline Cell dimensions=156X156 mm Thickness (Si)= 200 ± 30 µm Busbar no.: 2 Busbar dimemsions: Front: 1.8 mm Back: 3.0 mm	N/A	N/A
Solar cell**	C4	Solartech Energy Corp.	S156-3	Material: Mono-crystalline Cell dimensions=156X156 mm Thickness(Si)= 200 ± 30 µm Busbar no.: 3 Busbar dimemsions: Front: 1.5 mm Back: 3.0 mm	N/A	N/A
Number of solar cells	—	—	—	72/60/54/48/36	N/A	N/A
Cells per bypass diode	—	—	—	24/20/18/16/12	N/A	N/A
Serial/parallel connection of cells (S,SP,SPS)	—	—	—	Type S Cell in series: 72/60/54/48/36 Cell in parallel: 1	N/A	N/A
Bypass diode	BD1	Tyco Electronics	Schottky / SL1515B	Rating: 20 A Max. junction temp: 200 °C R_{thjL}: 2.0 K/W	N/A	N/A
Bypass diode	BD2	HY Electronic Corp.	15SQ045	Rating: 15 A Max. junction temp: 200 °C R_{thjc}: 3.5 K/W	N/A	N/A
Number of diodes	—	—	—	3	N/A	N/A
Cell connectors	CC1	Ulbrich	CDA 10	Material: Sn62/Pb36/Ag2 Thickness: 0.2+/-0.1 mm Width: 2.0 mm	N/A	N/A

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Constructional Data Form for Photovoltaic Modules

Cell connectors**	CC2	Gigastorage	CR1-2020B	Core : - Material: Copper - Width: 2.0 mm - Thickness: 0.2 mm Coating material: - Material: Sn62/Pb36/Ag2 - Coating thickness: 20 µm	N/A	N/A
Cell connectors***	CC3	Hong-Tai Electric Industrial	—	Core : - Material: Copper - Width: 2.0 mm - Thickness: 0.2 mm Coating material: - Material: Sn62/Pb36/Ag2 - Coating thickness: 20 µm	N/A	N/A
Cell connectors***	CC4	KOS Limited	KOSBON	Core : - Material: Copper - Width: 2.0 mm - Thickness: 0.2 mm Coating material: - Material: Sn62/Pb36/Ag2 - Coating thickness: 20 µm	N/A	N/A
String connectors	SC1	Ulbrich	CDA 10	Material: Sn62/Pb36/Ag2 Thickness: 0.5+/-0.2 mm Width: 5.0 mm	N/A	N/A
String connectors**	SC2	Gigastorage	BR1-5030B	Core : - Material: Copper - Width: 5.0 mm - Thickness: 0.3 mm Coating material: - Material: Sn62/Pb36/Ag2 - Coating thickness: 20 µm	N/A	N/A
String connectors***	CC3	Hong-Tai Electric Industrial	—	Core : - Material: Copper - Width: 5.0 mm - Thickness: 0.3 mm Coating material: - Material: Sn62/Pb36/Ag2 - Coating thickness: 20 µm	N/A	N/A
String connectors***	SC4	KOS Limited	KOSBON	Core : - Material: Copper - Width: 5.0 mm - Thickness: 0.3 mm Coating material: - Material: Sn62/Pb36/Ag2 - Coating thickness: 20 µm	N/A	N/A
Soldering material	SM1	Welley Solder Corp.	Super Flux Cored	Material: Sn 62% Pb 36%	N/A	N/A
Fluxing agent	FX1	Kester	955	N/A	N/A	N/A
Cable	CB1	Tyco Electronics	956298-4 / ZHSCG-35-X.X-Y	Max. core temp.:125 °C Rated Current: 55 A	TÜV 2Pfg1169/08.07	R 60021060
Cable	CB2	Suzhou baohing wire&cable Co., Ltd.	PV1-F / 4 mm^2	Max. conductor temp.: 120 °C Rated Current: 55 A	TÜV 2Pfg1169/08.07	R 50140161
Connectors	CN1	Tyco Electronics AMP GmbH	Female: 0-1394462-4 Male: 6-1394461-2	RTI: 110 °C Rated Current: 25 A	EN 50521:2008	R 60025797
Connectors	CN2	Yukita Electric Wire Co., LTD.	Female: YS-255 Male: YS-254	RTI: 105 °C Rated Current: 25 A	EN 50521:2008	R 50163741

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Constructional Data Form for Photovoltaic Modules

Junction box	JB1	Tyco Electronics	1740971-2 Model code: Medot4GBN3K	RTI: 110 ℃ Rated Current: 13 A Material: PPO	DIN V VDE V 0126-5/05.2008	R 60077789
Junction box	JB2	Yukita Electric Wire Co., LTD.	YJB-16	RTI: 110 ℃ Rated Current: 15 A Material: PPE + PS	DIN V VDE V 0126-5/05.2008	R 50155740
Junction box	JB3	Tyco Electronics	1-1740971-6 Model code: Medot4GBN3K	RTI: 110 ℃ Rated Current: 13 A Material: PPO	DIN V VDE V 0126-5/05.2008	R 60077789
Junction box	JB4	Tyco Electronics	2-1740971-3 Model code: Medot4GBN3K	RTI: 110 ℃ Rated Current: 13 A Material: PPO	DIN V VDE V 0126-5/05.2008	R 60077789
Adhesive (junction box)	JBA1	Momentive	TSE382	Composition: Silicon	N/A	N/A
Potting material***	JBP1	Shinetsu Chemical Co., Ltd.	KE200	Composition: Silicon	N/A	N/A
Fixing tape for string alignment	FT1	3M	8306	Material: Polyester / Acrylic Color: Clear Size: 15x25 mm	N/A	N/A
Insulation pad (on string connectors)	IP1	Coveme SPA	dyMat PYE	Material: PET/Adhesive/PET/ Adhesive/EVA Thickness: 295 µm RTI: 130 ℃	IEC 60664-1, IEC 61730	21209108
Insulation pad (on string connectors)**	IP2	3M	3M™ Scotchshield™ Film 15T Black	Material: Fluorthermoplast/PET /EVA Thickness: 300 µm RTI: 105 ℃ Color: Black	IEC 60664-1	21214914
Insulation pad (on string connectors)**	IP3	3M	3M™ Scotchshield™ Film 15T	Material: Fluorthermoplast/PET /EVA Thickness: 300 µm RTI: 105 ℃ Color: White	IEC 60664-1	21211649
(Optional) Accessories	N/A	N/A	N/A	N/A	N/A	N/A

Remark:
* Ref. code is assigned for further check of material usage in section of Qualified Combination of Material Usage.
** Qualified in this project.
*** Extension materials without testing in this project.
- The qualification is based on information of certificate PV 50227512, PV 50227513 and their extension project.

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Constructional Data Form for Photovoltaic Modules

Detailed Cell Information corresponding to Qualified Module Type

Manufacturer	Type	Qualified Module type	
Solartech Energy Corp.	M-156-2 / 6" Multi-crystalline (2 Busbar)	SEC-6P-72-XXX	(XXX=265-320, in steps of 5, 72 cells)
		SEC-6P-60-XXX	(XXX=220-265, in steps of 5, 60 cells)
		SEC-6P-54-XXX	(XXX=200-240, in steps of 5, 54 cells)
		SEC-6P-48-XXX	(XXX=175-210, in steps of 5, 48 cells)
		SEC-6P-36-XXX	(XXX=135-150, in steps of 5, 36 cells)
Solartech Energy Corp.	M-156-3 / 6" Multi-crystalline (3 Busbar)	SEC-6P-72-XXX-3BB	(XXX=265-320, in steps of 5, 72 cells)
		SEC-6P-60-XXX-3BB	(XXX=220-265, in steps of 5, 60 cells)
		SEC-6P-54-XXX-3BB	(XXX=200-240, in steps of 5, 54 cells)
		SEC-6P-48-XXX-3BB	(XXX=175-210, in steps of 5, 48 cells)
		SEC-6P-36-XXX-3BB	(XXX=135-150, in steps of 5, 36 cells)
Solartech Energy Corp.	S-156-2 / 6" Mono-crystalline (2 Busbar)	SEC-6M-72-XXX	(XXX=270-325, in steps of 5, 72 cells)
		SEC-6M-60-XXX	(XXX=225-270, in steps of 5, 60 cells)
		SEC-6M-54-XXX	(XXX=205-245, in steps of 5, 54 cells)
		SEC-6M-48-XXX	(XXX=180-215, in steps of 5, 48 cells)
		SEC-6M-36-XXX	(XXX =135-160, in steps of 5, 36 cells)
Solartech Energy Corp.	S-156-3 / 6" Mono-crystalline (3 Busbar)	SEC-6M-72-XXX-3BB	(XXX=270-325, in steps of 5, 72 cells)
		SEC-6M-60-XXX-3BB	(XXX=225-270, in steps of 5, 60 cells)
		SEC-6M-54-XXX-3BB	(XXX=205-245, in steps of 5, 54 cells)
		SEC-6M-48-XXX-3BB	(XXX=180-215, in steps of 5, 48 cells)
		SEC-6M-36-XXX-3BB	(XXX=135-160, in steps of 5, 36 cells)

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Constructional Data Form for Photovoltaic Modules

Qualified Combination of Material Usage

Combination / Object	1.(Cross-usage)	2.
Front cover	G1/G2/G3/G4/G5/G6/G7/G8	*
Rear cover	B1	B2/B3
Encapsulation material	E1	E2
Frame parts	F1/F2/F3/F4/F5/F6	*
Edge sealing or adhesive (frame)	S1/S2	*
Solar cell	C1	C2
Cell connector	CC1/CC2/CC3/CC4	*
String connector	SC1	SC2/SC3/SC4
Soldering material	SM1	*
Fluxing agent	FX1	*
Fixing tape for string alignment	FT1	*
Insulation pad (on connectors)	IP1	IP2/IP3
Remark: * The same with 1. * The same with 2.		

Junction Box Usage Information

Combination / Object	1.	2.	—
Junction box	JB1/JB3/JB4	JB2	—
Cable	CB1	CB2	—
Connectors	CN1	CN2	—
Bypass diode	BD1	BD2	—
Adhesive (junction box)	JBA1	*	—
Potting material	N/A	N/A or JBP1	—
Rear cover	B1	B1/B2/B3	—
Remark: * The same with 1			

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