Spark™ Solar

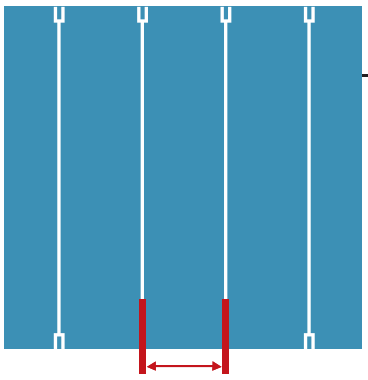
Powered By The Sun™

SS 72 CELL 6 BB SERIES

Next Generation 6 BusBar Solar Modules

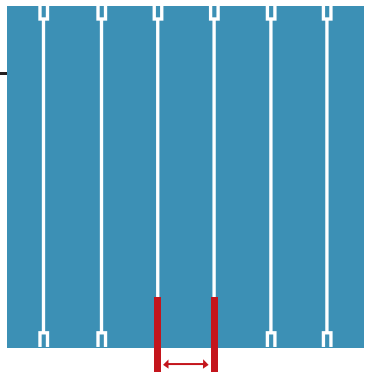
SUPERIOR PERFORMANCE
EXCELLENT QUALITY

Standard 4 busbar technology



Cell

Advanced 6 busbar technology



Wider distance between busbar for electrons to travel, leads to higher electrodes resistance and reduces the conversion efficiency. More residual stress and Micro-cracks

A shorter distance for Electrons to travel vastly reduces electrodes resistance and raise the conversion efficiency. Less residual stress, less Micro-cracks.

- Wider Distance Between Bus Bars
- Lower Power, Less Reliability
- Shorter Distance Between Bus Bars
- Higher Power, Better Reliability

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HIGHER PERFORMANCE CLASSES

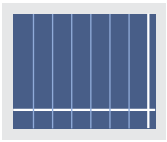
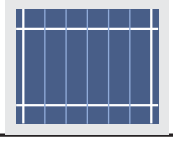
Thanks to 6 busbar technology. Spark Solar modules offer more power per square meter, resulting in higher yields at lower BOS cost.

TEMPERATURE COEFFICIENT

Even on hot days, Spark Solar modules produce reliable yields and lose less efficiency than standard solar modules.

LOW-LIGHT BEHAVIOUR

High yields with low radiation intensity

New 6 busbar cell design for more power and better reliability. The narrower distance between the busbars allows better flow of electrons and reduces power loss. Can decrease the risk of the cell Micro cracks and broken finger.	
45mm high-tech frame for faster module cooling which reduces the thermal resistance and increases the surface area for convection. Wind and Snow loads up to 4000/5400Pa(IEC).	
Reduced edges avoids dirt and moss build up.	
High-quality anti-reflection technology processed via the sol-gel roller coating method that directs more Light on solar cells for higher energy yields.	
Optimised, even cell spacing improves performance and avoids micro cracks.	
Optimally positioned, large drainage holes and asymmetric frame design protect against frost damage.	

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Spark-SS 72 P | 6 Bus Bar Series

upto **17.5%** EFFICIENCY

10 YEAR PRODUCT WARRANTY

25 YEAR LINEAR POWER OUTPUT WARRANTY

TEMPERATURE RATINGS*

Nominal Module Operating Temperature :		44.0°C (±3°C)
Temperature coefficient of P_{MPP}	(Y)	-0.38 %/°C
Temperature coefficient of V_{oc}	(β)	-0.27 %/°C
Temperature coefficient of I_{sc}	(α)	0.03 %/°C

*The temperature coefficients stated are linear values

GENERAL DATA

Cell type	:	72 Multi-crystalline cells
Cell Matrix	:	72 cells (6 x 12)
Junction box	:	Protection class IP 67 or 68, with 3 bypass diodes
Cable	:	4mm² solar cable, ≥ 1200 mm,
Frame	:	Silver anodized aluminum alloy
Glass	:	3.2 mm solar glass with anti-reflective technology
Connectors	:	UTX / TS4 / Multi-Contact MC4 (4 mm²)

MAXIMUM RATINGS

Operating temperature (Permitted Module Temperature on Continuous Duty)	:	-40 upto +85°C
Maximum system voltage	:	1000 V_{DC} / 1500 $V_{DC(IEC/UL)}$
Max series fuse rating	:	15 A
Max reverse current	:	15 A
Maximum test load (-) wind	:	244 kg/m² (2400 Pa)
Maximum test load (+) snow	:	550 kg/m² (5400 Pa)
Max. hailstone impact (diameter / velocity)	:	255mm /23m/s
Application classification	:	Class A
Safety Class	:	II
Fire Rating	:	C

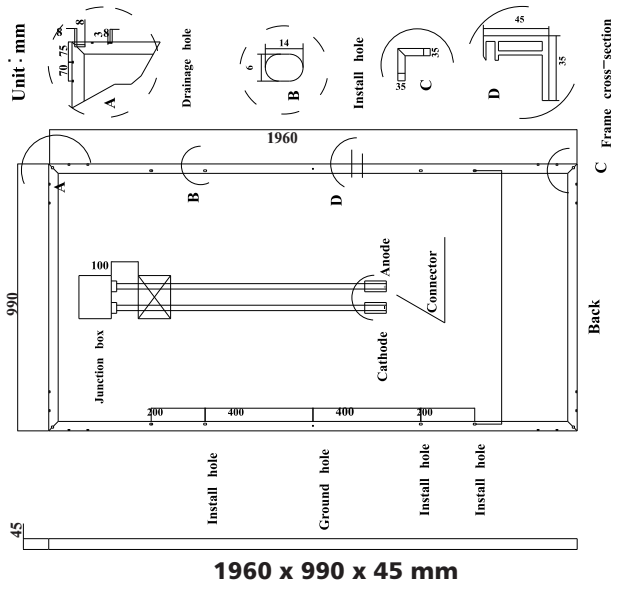
MECHANICAL SPECIFICATION

Dimensions	:	1960 x 990 x 45 mm
Area	:	1.94 m²
Weight	:	23 kg (50.71 lbs)

PACKAGING INFORMATION

Container Size	20'	40'HC
Quantity Per Pallet :	22	24
Pallets/Container :	12	24
Quantity/Container :	264	576

*Due to continuous innovation, research and product improvement the specifications in this product information sheet are subject to change without prior notice. Installation instructions must be followed. See the installation manual or contact technical service department for further information on approved installation. Atleast 97.5% of nominal power during first year. Thereafter max. degression in performance of 0.7% p.a. See warranty conditions for further details.



1960 x 990 x 45 mm

ELECTRICAL DATA@STC

Module code* : SSXXX72P 6BB

Nominal Power - P_{MPP} (Wp)	340	335	330	325	320	315
Power Tolerance - (W)	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Nominal Power Voltage - V_{MPP} (V)	38.1	37.7	37.3	36.94	36.5	36
Nominal Power Current - I_{MPP} (A)	8.93	8.89	8.85	8.81	8.78	8.75
Open Circuit Voltage - V_{OC} (V)	45.9	45.7	45.6	45.42	45.2	45
Short Circuit Current - I_{SC} (A)	9.41	9.37	9.33	9.35	9.25	9.21
Panel Efficiency - (%)	17.5	17.3	17.1	16.8	16.5	16.3

Values at standard test conditions STC (airmass AM 1.5, irradiance 1000 W/m², cell temperature 25°C).
*Where xxx indicates the nominal power class (P_{MPP}) at STC indicated above.

ELECTRICAL DATA@NMOT

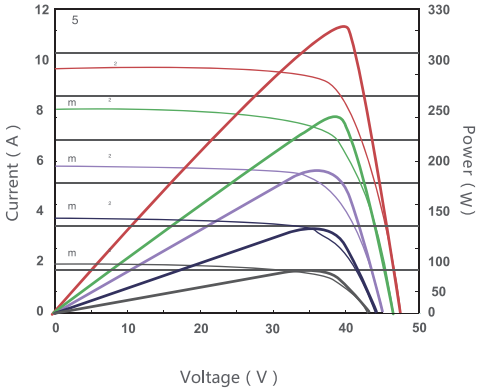
Module code* : SSXXX72P 6BB

Nominal Power - P_{MPP} (Wp)	251.3	247.4	244.2	240.0	236.2	232.4
Nominal Power Voltage - V_{MPP} (V)	35	34.6	34.3	33.9	33.5	33.1
Nominal Power Current - I_{MPP} (A)	7.18	7.15	7.12	7.08	7.05	7.02
Open Circuit Voltage - V_{OC} (V)	42.6	42.4	42.3	42.2	42.0	41.8
Short Circuit Current - I_{SC} (A)	7.58	7.55	7.52	7.49	7.45	7.42

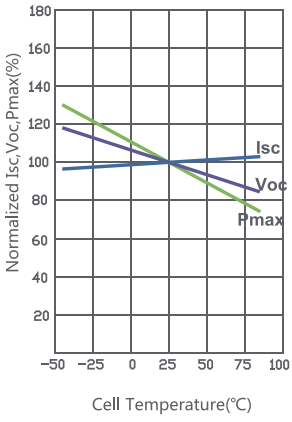
Nominal Module Operating Temperature NMOT (800 W/m², AM 1.5, windspeed 1 m/s, ambient temperature 20°C). Typical values, actual values may differ. *Where xxx indicates the nominal power class (P_{MPP}) at STC indicated above.

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves



Temperature Dependence of Isc, Voc, Pmax



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