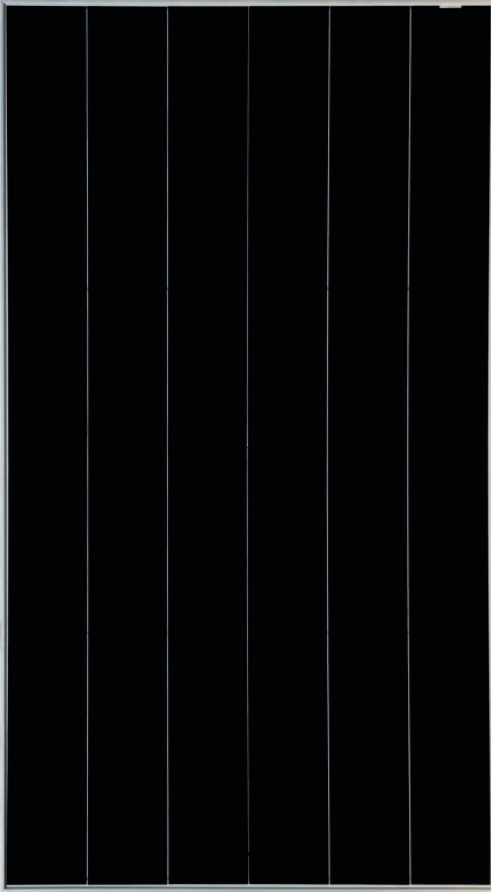




# X-CHROS Monocrystalline BIFACIAL GLASS GLASS

635 - 645 - 650 - 655 - 660 - 665 - 670 Wp



Shingled solar cells



Double glass module with frame



Positive Tolerance



High Voltage 1500 DC



Anti-PID and low LID



21.6 % max efficiency

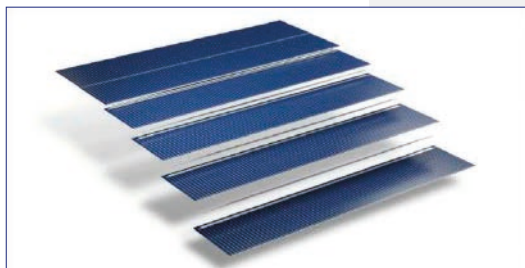


Product Warranty

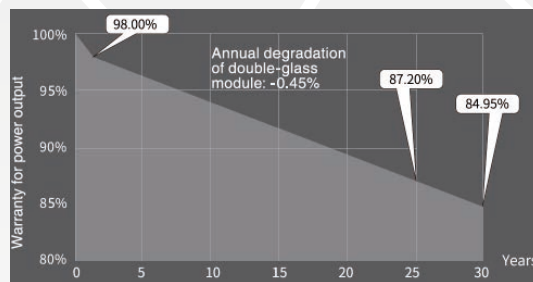


Linear Warranty

The new photovoltaic modules X-CHROS is one of a wide range of products made by Sunerg and It is manufactured according to IEC 61215, IEC 61730 standard and CE. PERC Shingled Technology provides ultra -high efficiency with better performance in low irradiation. Maximizes installation capacity in limited space.



### LINEAR WARRANTY



- look warranty terms -

CORRESPOND TO  
PV CYCLE | CE |

UNI EN ISO 9001:2008 | Quality management system  
 UNI EN ISO 14001:2004 | Standards for environmental management system  
 UNI EN BS OHSAS 18001:2007 | International standards for occupational health and safety

**ELECTRICAL DATA (STC)**

XMCH138635Q+HBF XMCH138640Q+HBF XMCH138645Q+HBF XMCH138650Q+HBF XMCH138655Q+HBF XMCH138660Q+HBF XMCH138665Q+HBF XMCH138670Q+HBF

Open circuit Voltage	(Voc)	46.40 V	46.50 V	46.60 V	46.70 V	46.80 V	46.90 V	47.00 V	47.10 V
Voltage a Pmax.	(Vmp)	38.50V	38.60 V	38.70 V	38.80 V	38.80 V	38.90 V	39.00 V	39.10 V
Short-circuit current	(Isc)	17.54 A	17.64 A	17.74 A	17.84 A	17.97 A	18.06 A	18.16 A	18.26 A
Current at Pmax.	(Imp)	16.49 A	16.58 A	16.68 A	16.77 A	16.89 A	16.98 A	17.07 A	17.16 A
Peak Power (Pmax) Tolerance 0 ~ +5W		635 Wp	640 Wp	645 Wp	650 Wp	655 Wp	660 Wp	665 Wp	670 Wp
Module Efficiency		20.4 %	20.6 %	20.8 %	20.9%	21.1 %	21.2 %	21.4 %	21.6 %
Maximum voltage		1500 DC	1500 DC	1500 DC	1500 DC	1500 DC	1500 DC	1500 DC	1500 DC
Maximum series fuse rating		30A	30A	30A	30A	30A	30A	30A	30A
Operating Temperature		-40°C - +85°C	-40°C - +85°C	-40°C - +85°C	-40°C - +85°C	-40°C - +85°C	-40°C - +85°C	-40°C - +85°C	-40°C - +85°C

**ELECTRICAL DATA (NMOT)**

Maximum Power	(Pmax)	478	482	486	489	493	497	501	504
Open Circuit Voltage	(Voc)	44.2	44.2	44.3	44.4	44.5	44.7	44.8	44.9
Short Circuit Current	(Isc)	14.13	14.21	14.29	14.37	14.47	14.55	14.63	14.71
Maximum Power Voltage	(Vmp)	36.7	36.8	36.9	37.0	37.0	37.1	37.2	37.3
Maximum Power Current	(Imp)	13.02	13.10	13.17	13.25	13.32	13.39	13.46	13.54

**ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (REFERENCE TO 660W FRONT)**

Power Gain-PG		30%	25%	20%	15%	10%	5%
Maximum Power	(Pmax)	858	825	792	759	726	693
Open Circuit Voltage	(Voc)	47.0	47.0	47.0	46.9	46.9	46.9
Short Circuit Current	(Isc)	23.48	22.58	21.68	20.77	19.87	18.97
Maximum Power Voltage	(Vmp)	39.0	39.0	39.0	38.9	38.9	38.9
Maximum Power Current	(Imp)	22.07	21.23	20.38	19.53	18.68	17.83

\* STC (Standard test conditions)

 Irradiance 1000 w/m<sup>2</sup>, module temperature 25°C, AM= 1.5

**TEMPERATURE COEFFICIENT**

NMOT	42.3°C±2°C
Pmax Temperature Coefficient	-0.34%/ °C
Voc Temperature Coefficient	-0.27%/ °C
Isc Temperature Coefficient	0.04% / °C

**MECHANICAL CHARACTERISTIC**

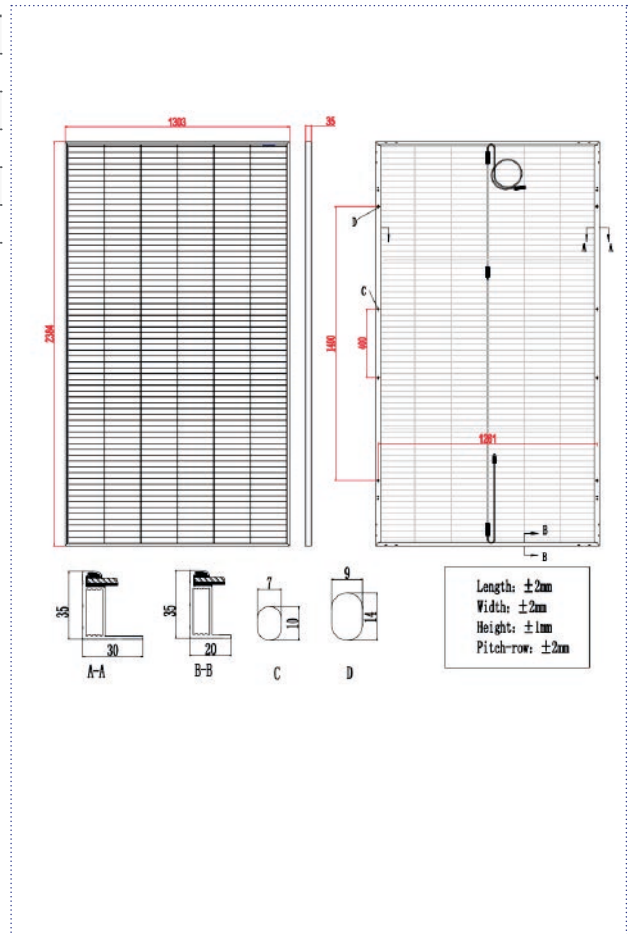
Max. surface load capacity (Pa)	5400 Front / 2400 Back
Dimensions (mm)	2384x1303x35 mm
Weight (Kg)	39
Encapsulation	EVA
Cells	mono-crystalline solar cell
Cells orientation	414 (69*6)

**PAKAGING CONFIGURATION**

Modules per pallet	31		
Pallets per container 40'GP	18	Modules per Container	558

**GENERAL INFORMATION**

Glass	tempered glass, 2mm
Frame	Anodized Aluminum profile
Junction Box	IP68, 3 diodes
Output Cable - connectors	4mm <sup>2</sup> , lenght 600 mm/-1200mm (vertical) +250mm/-150mm (horizontal), MC4 Compatible



Sunerg Solar S.r.l. reserves the right to make changes to the technical data of the product without prior notice. The technical details of the form, although included with the utmost care, may contain errors or inaccuracies not attributable to Sunerg Solar S.r.l.