

C2 M

Back Contact Solar Panel

G12R-66P

N-type Bifacial

Double Glass

HSM-BD66-GR645-670

670W

Maximum Power Output

24.8% Maximum Efficiency



Higher energy density;
lower operating temperature



Lower hotspot temperature;
reduce risk of micro-cracks



Refined design,
Busbar-free front side



Comprehensive supply chain integration,
redefining BC standards

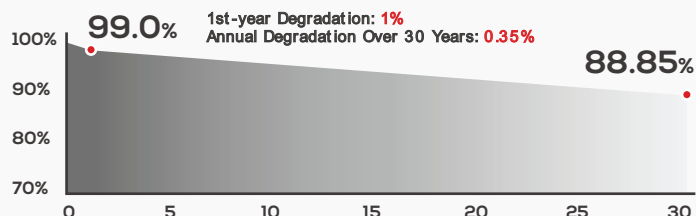
Linear Performance Warranty



15 Years
Product Warranty



30 Years Linear
Performance Warranty



Comprehensive Products and System Certificates



IEC 61215 / IEC 61730 ISO 9001:2015 ISO 45001:2018 ISO 14001:2015

Electrical Parameters (STC* & BNPI*)

* STC: Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measurement tolerance is Pmax ± 3%, Voc ± 3%, Isc ± 4%* BNPI: Front Irradiance 1000W/m², Back Irradiance 135W/m², Ambient Temperature 25°C, AM1.5, Measurement tolerance is Pmax ± 3%, Voc ± 3%, Isc ± 4%

Testing Condition		STC		BNPI		STC		BNPI		STC		BNPI		STC		BNPI		STC		BNPI	
Maximum Power	Pmax (W)	645	705	650	710	655	716	660	721	665	727	670	732	675	737	680	742	685	747	690	752
Open Circuit Voltage	Voc (V)	49.25	49.39	49.40	49.52	49.55	49.68	49.70	49.83	49.85	49.99	50.00	50.15	50.05	50.20	50.10	50.25	50.15	50.30	50.20	50.35
Short Circuit Current	Isc (A)	16.57	18.06	16.65	18.14	16.73	18.24	16.80	18.31	16.88	18.40	16.95	18.49	17.02	18.57	17.10	18.65	17.18	18.73	17.25	18.79
Maximum Power Voltage	Vmp (V)	41.14	41.14	41.23	41.21	41.32	41.32	41.41	41.39	41.50	41.50	41.59	41.57	41.68	41.68	41.77	41.75	41.88	41.88	41.97	41.95
Maximum Power Current	Imp (A)	15.68	17.14	15.77	17.23	15.86	17.33	15.94	17.42	16.03	17.52	16.11	17.62	16.20	17.71	16.29	17.80	16.38	17.89	16.47	17.98
Module Efficiency	(%)	23.9		24.1		24.2		24.4		24.6		24.8		24.9		25.1		25.3		25.5	

Electrical Characteristics with Different Bifacial Gain*

* The additional gain from the back side depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

* Measurement tolerance of Bifaciality Coefficients: ϕP_{max} : ±10%, ϕVoc : ±2%

Bifacial Gain		5%		10%		5%		10%		5%		10%		5%		10%		5%		10%	
Maximum Power	Pmax (W)	677	710	683	715	688	721	693	726	698	732	704	737	709	742	714	747	719	752	724	757
Open Circuit Voltage	Voc (V)	49.25	49.25	49.40	49.40	49.55	49.55	49.70	49.70	49.85	49.85	50.00	50.00	50.15	50.15	50.30	50.30	50.45	50.45	50.60	50.60
Short Circuit Current	Isc (A)	17.40	18.23	17.48	18.32	17.57	18.40	17.64	18.48	17.72	18.57	17.80	18.65	17.88	18.73	17.96	18.81	18.04	18.89	18.12	18.97
Maximum Power Voltage	Vmp (V)	41.14	41.14	41.23	41.23	41.32	41.32	41.41	41.41	41.50	41.50	41.59	41.59	41.68	41.68	41.77	41.77	41.88	41.88	41.97	41.97
Maximum Power Current	Imp (A)	16.46	17.25	16.56	17.35	16.65	17.45	16.74	17.53	16.83	17.63	16.92	17.72	17.01	17.81	17.10	17.91	17.19	17.99	17.28	18.09

Bifaciality Coefficients*

 ϕP_{max} : 80%, ϕVoc : 100%, ϕIsc : 80%

Temperature Coefficient

Nominal Module Operating Temperature*	43±2°C
Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Pmax	-0.26%/°C

Operating Parameters

Operating Temperature	-40~+70°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Bifaciality	75±5%
Safety Protection Rating	Class II
Fire Rating	Class C

Mechanical Data

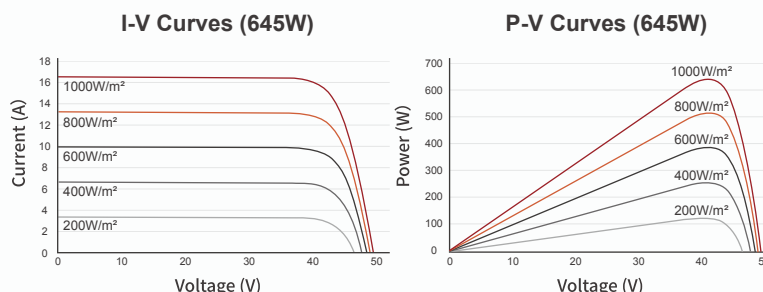
* Please refer to installation manual for details

No. of Cells	132pcs (6×22)
Dimension	2382×1134×30 mm
Weight	32.5kg ± 3%
Front Glass	2.0mm, Heat Strengthened, AR coating Glass
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
J-Box	IP68, three diodes
Cables	4.0mm ² , +400mm, -200mm (can be customized)
Maximum Static Load	Front: 5400Pa/Back: 2400Pa*
Connector	Stäubli MC4-EVO2A

Packaging Configuration

Modules per Pallet	36pcs
Modules per 40'HQ Container	720pcs
Pallets per 40'HQ Container	20pcs

Curve Graph



Engineering Drawing

[Unit: mm]

