

Harmony^{Flow} series

465~495Watt

UL-***M-108CDGBT (Transparent design)

- Simple design embodies modern style
- Highest efficiency with the best energy generation performance
- N-type TaiRay wafer & HPBC2.0 & 0BB innovative structure
- O-Anti-Shading & Prevent Localized Overheating

15

15-year Warranty for
Materials and Processing

30

30-year Warranty for Extra
Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

24.3%
MAX MODULE
EFFICIENCY

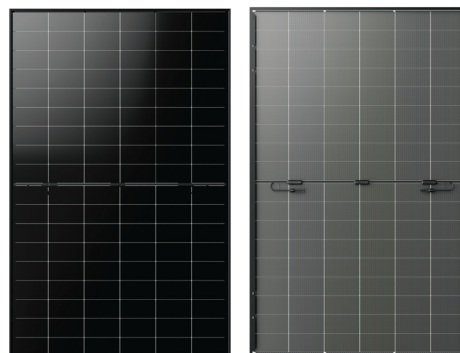
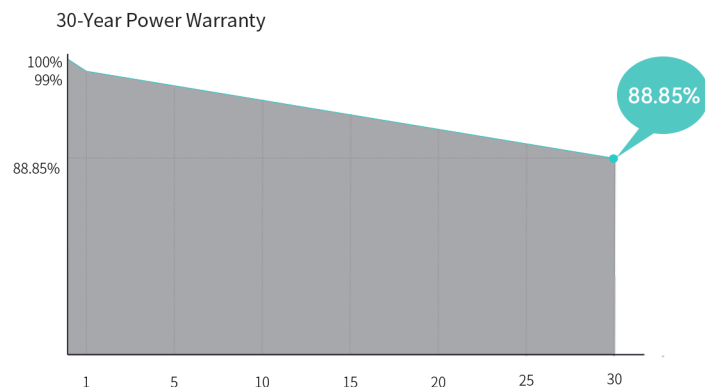
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

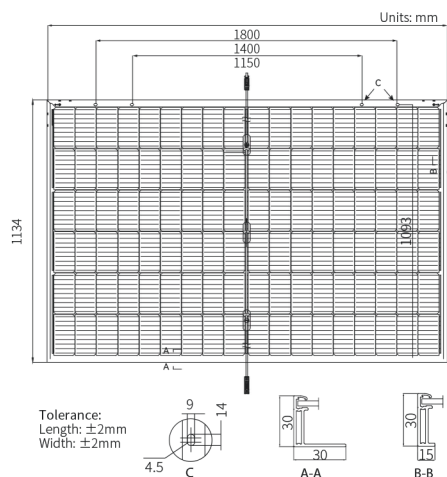
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm/±1200mm length can be customized
Glass	Double glass 2.0mm coated tempered glass+1.6mm semi-tempered glass
Frame	Black anodized aluminum alloy frame
Weight	23.5kg
Dimension	1800×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 864pcs per 40' HC



Electrical Characteristics

STC: AM1.5 1000W/m² 25°C

NOCT: AM1.5 800W/m² 20°C 1m/s

Test uncertainty for Pmax: ±3%

Module Type	UL-465M-108CDGBT		UL-470M-108CDGBT		UL-475M-108CDGBT		UL-480M-108CDGBT		UL-485M-108CDGBT		UL-490M-108CDGBT		UL-495M-108CDGBT	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	465	353	470	357	475	361	480	365	485	369	490	373	495	377
Open Circuit Voltage (Voc/V)	40.20	38.17	40.31	38.28	40.42	38.39	40.53	38.50	40.64	38.61	40.75	38.73	40.86	38.84
Short Circuit Current (Isc/A)	14.68	11.75	14.78	11.84	14.88	11.93	14.98	12.02	15.08	12.10	15.18	12.19	15.28	12.27
Voltage at Maximum Power (Vmp/V)	33.18	31.49	33.29	31.60	33.40	31.71	33.51	31.82	33.62	31.93	33.73	32.05	33.84	32.16
Current at Maximum Power (Imp/A)	14.02	11.21	14.13	11.30	14.23	11.39	14.33	11.48	14.43	11.56	14.53	11.65	14.63	11.73
Module Efficiency(%)	22.8		23.0		23.3		23.5		23.8		24.0		24.3	

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	IEC Class C

Mechanical Loading

Front Side Maximum Static	5400Pa
Loading Rear Side Maximum	2400Pa
Static Loading Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.200%/°C
Temperature Coefficient of Pmax	-0.260%/°C



Specifications included in this datasheet are subject to change without notice.

Ulica Solar reserves the right of final interpretation.

Version number: UL-1800-108CDGBTH-30-EN-V1.0

Website