500~520 Watt

HORAY | TIER1 BloombergNEF

HS 210R-108 TC-D *Cosmos* *N-type Bifacial Modules*

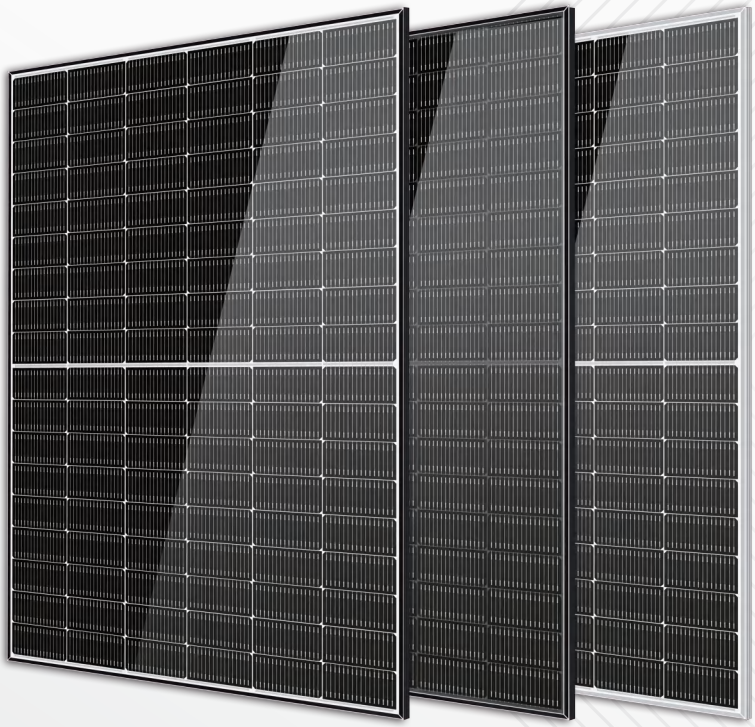
SMBB Half-Cell Technology
More uniform current distribution, reducing heat loss in internal cells.

Higher Output Power
The output power of 108 half-cell monocrystalline modules is up to 520W.

Low Light Features
Higher performance under low light environment.

Harsh Environmental Adaptability
Strict salt spray and ammonia corrosion tests by a third party.

Lower Power Attenuation
Anti-PID and negligible LID/LeTID, which reduces power loss.



IEC 61215:2021

IEC 61730:2023

ISO 9001:2015 Quality Management System

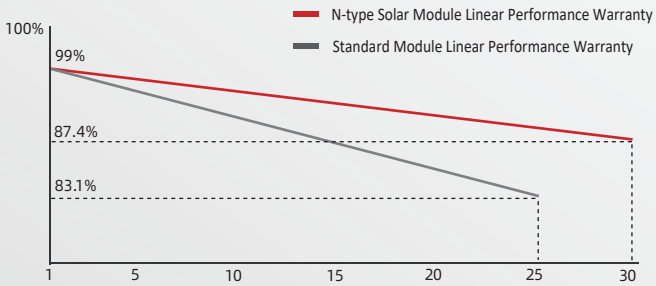
ISO 14001:2015 Environmental Management System

ISO 45001:2018 Occupational Health and Safety Management System

CE Marking: European Conformity

CQC: China Quality Certification Centre

Solar Product Certification



15 15-year product warranty

30 30-year linear power output warranty

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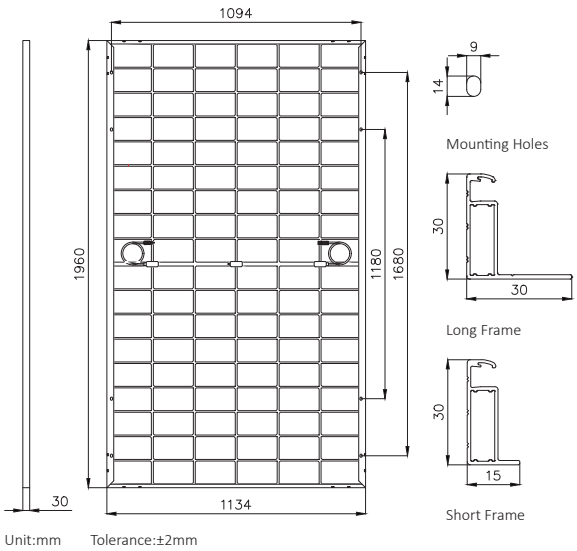
HS 210R-108 TC-D

MECHANICAL DIAGRAMS



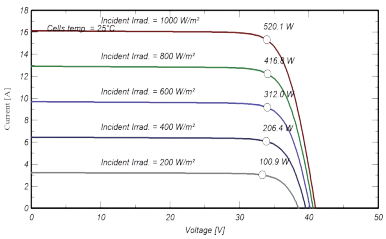
Unit:mm Tolerance:±2mm

MECHANICAL PARAMETERS

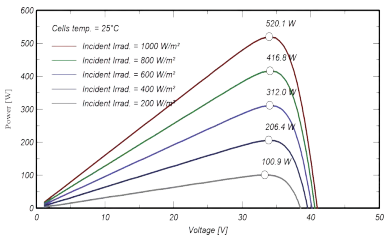
Weight	26.7kg
Dimension	1960×1134×30mm
Cell Orientation	108(6×18)
Junction Box	IP68, three diodes
Output Cable	4mm², ±1100mm (length can be customized)
Connector	MC4 compatible
Glass	2.0+2.0mm AR coated heat strengthened glass
Frame	Anodized aluminum alloy frame
Packaging	37pcs per pallet/888pcs per 40'HC

CURVES OF PV MODULE

HS520TC-MHC-D



HS520TC-MHC-D



ELECTRICAL CHARACTERISTICS AT STC

Module Type	HS500TC-MHC-D	HS505TC-MHC-D	HS510TC-MHC-D	HS515TC-MHC-D	HS520TC-MHC-D
Testing Condition	STC	STC	STC	STC	STC
Maximum Power(Pmax/W)	500	505	510	515	520
Open Circuit Voltage(Voc/V)	40.16	40.35	40.55	40.74	40.94
Short Circuit Current(Isc/A)	15.82	15.90	15.98	16.06	16.14
Maximum Power Voltage(Vmp/V)	33.37	33.53	33.70	33.86	34.02
Maximum Power Current(Imp/A)	14.98	15.06	15.14	15.21	15.29
Module Efficiency(%)	22.4	22.7	22.9	23.1	23.3

* Standard Test Conditions (STC): Irradiance 1000W/m², AM 1.5, Cell temperature 25°C. Power measurement tolerance: ±3%.

ELECTRICAL CHARACTERISTICS AT BNPI

Module Type	HS500TC-MHC-D	HS505TC-MHC-D	HS510TC-MHC-D	HS515TC-MHC-D	HS520TC-MHC-D
Testing Condition	BNPI	BNPI	BNPI	BNPI	BNPI
Maximum Power(Pmax/W)	550	556	561	567	572
Open Circuit Voltage(Voc/V)	40.16	40.35	40.55	40.74	40.94
Short Circuit Current(Isc/A)	17.56	17.65	17.74	17.83	17.92
Maximum Power Voltage(Vmp/V)	33.37	33.53	33.70	33.86	34.02
Maximum Power Current(Imp/A)	16.48	16.57	16.65	16.73	16.81

* Bifacial Nameplate Irradiance(BNPI): Irradiance front 1000W/m², rear 135W/m². Power measurement tolerance: ±3%.

OPERATING PARAMETERS

Operating Temperature Range	-40°C~+85°C
Power Output Tolerance	0~3%
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Nominal Module Operating Temperature	45±2°C
[T98]max	≤70°C
Protection Class	Class II
Bifaciality coefficient of Pmax	80±5%
Fire Rating	IEC Class A

MECHANICAL LOADING

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

TEMPERATURE RATINGS (STC)

Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.23%/°C
Temperature Coefficient of Pmax	-0.28%/°C

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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Specifications included in this datasheet are subject to change without notice.
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