620~640 Watt

HORAY | TIER1 BloombergNEF

HS 210R-132 TC-D *Cosmos* *N-type Bifacial Modules*

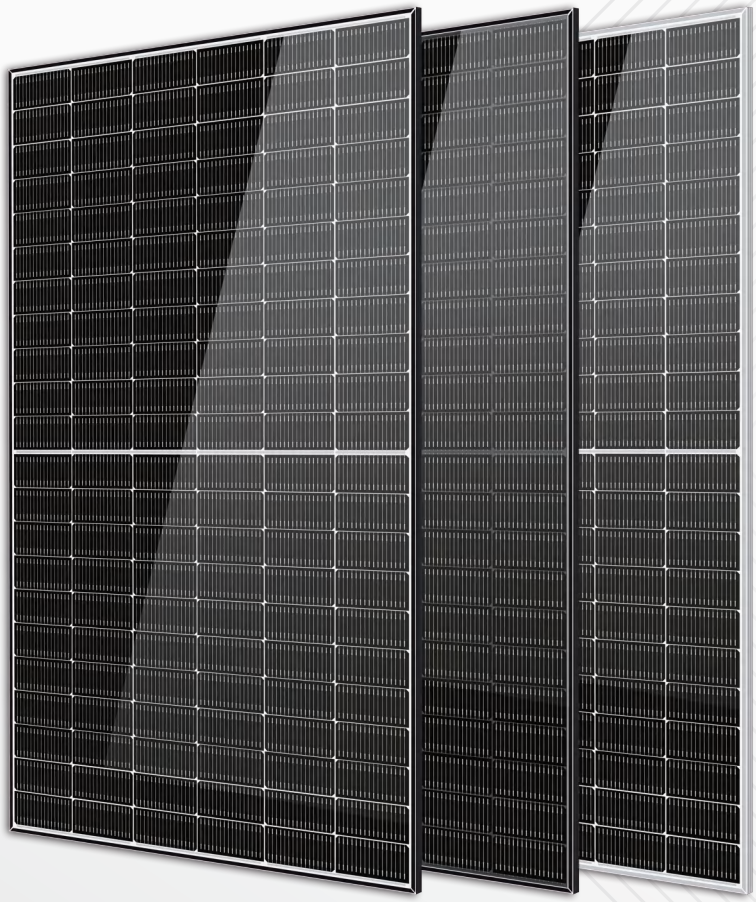
SMBB Half-Cell Technology
More uniform current distribution, reducing heat loss in internal cells.

Higher Output Power
The output power of 132 half-cell monocrystalline modules is up to 640W.

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

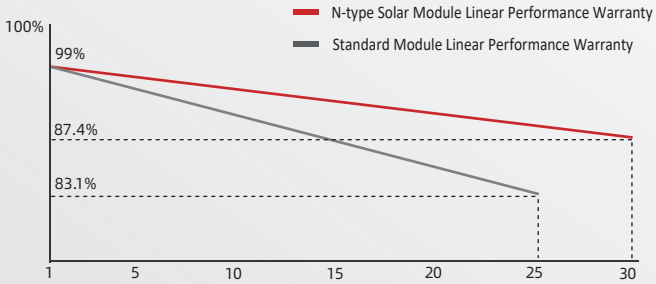
ISO 14001:2015 Environmental Management System

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

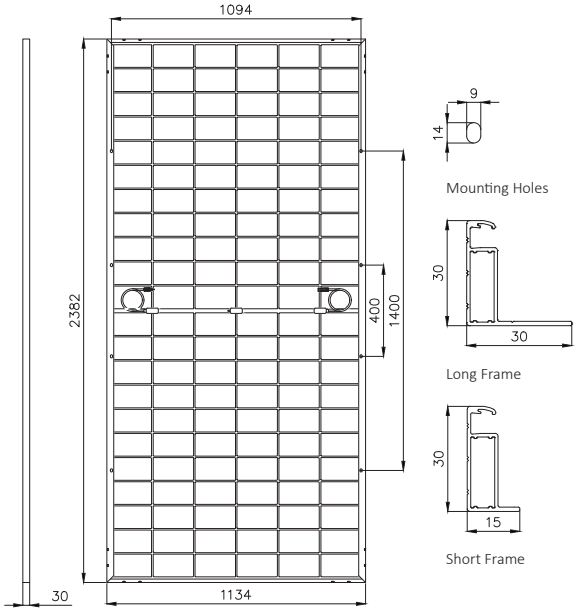
30 30-year linear power output warranty

HEADQUARTER: HORAY SOLAR CO., LTD.
sales@horaysolar.com www.horaysolar.com +86-510 83580688
No.300 Huiming Road, Huishan District, 214177 Wuxi, Jiangsu, P.R. China

GLOBAL MARKETING AND SERVICE: HORAY SOLAR GMBH
info@horaysolar.com www.horaysolar.com
Robert-Bosch-Straße 27-29, 63225 Langen, Germany

HS 210R-132 TC-D

MECHANICAL DIAGRAMS



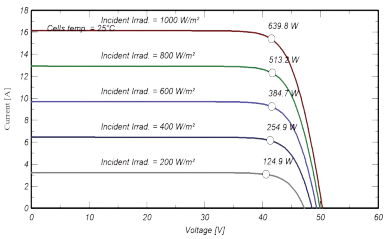
Unit:mm Tolerance:±2mm

MECHANICAL PARAMETERS

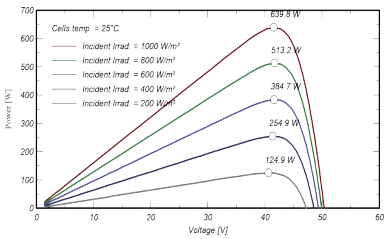
Weight	32.5kg
Dimension	2382×1134×30mm
Cell Orientation	132(6×22)
Junction Box	IP68, three diodes
Output Cable	4mm², ±300mm(length can be customized)
Connector	MC4 compatible
Glass	2.0+2.0mm AR coated heat strengthened glass
Frame	Anodized aluminum alloy frame
Packaging	36pcs per pallet/720pcs per 40'HC

CURVES OF PV MODULE

HS640TC-MHC-D



HS640TC-MHC-D



ELECTRICAL CHARACTERISTICS AT STC

Module Type	HS620TC-MHC-D	HS625TC-MHC-D	HS630TC-MHC-D	HS635TC-MHC-D	HS640TC-MHC-D
Testing Condition	STC	STC	STC	STC	STC
Maximum Power(Pmax/W)	620	625	630	635	640
Open Circuit Voltage(Voc/V)	49.40	49.63	49.87	50.11	50.35
Short Circuit Current(Isc/A)	15.95	16.00	16.05	16.10	16.15
Maximum Power Voltage(Vmp/V)	41.05	41.25	41.45	41.65	41.84
Maximum Power Current(Imp/A)	15.10	15.15	15.20	15.25	15.29
Module Efficiency(%)	22.9	23.1	23.3	23.5	23.7

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

ELECTRICAL CHARACTERISTICS AT BNPI

Module Type	HS620TC-MHC-D	HS625TC-MHC-D	HS630TC-MHC-D	HS635TC-MHC-D	HS640TC-MHC-D
Testing Condition	BNPI	BNPI	BNPI	BNPI	BNPI
Maximum Power(Pmax/W)	682	688	693	699	704
Open Circuit Voltage(Voc/V)	49.40	49.63	49.87	50.11	50.35
Short Circuit Current(Isc/A)	17.55	17.60	17.66	17.71	17.77
Maximum Power Voltage(Vmp/V)	41.05	41.25	41.45	41.65	41.84
Maximum Power Current(Imp/A)	16.61	16.67	16.72	16.77	16.82

* 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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