

425~440 Watt

HORAY

TIER1
BloombergNEF

HL 182-108 TC 1.6 Lite N-type Mono-facial Modules



7.3kg/m², 35% lighter than conventional glass module.



Ideal for rooftops with limited load capacity



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 440W.



Mechanical Load Enhanced

Heavy snow load up to 3600 Pa, wind load up to 2400 Pa.



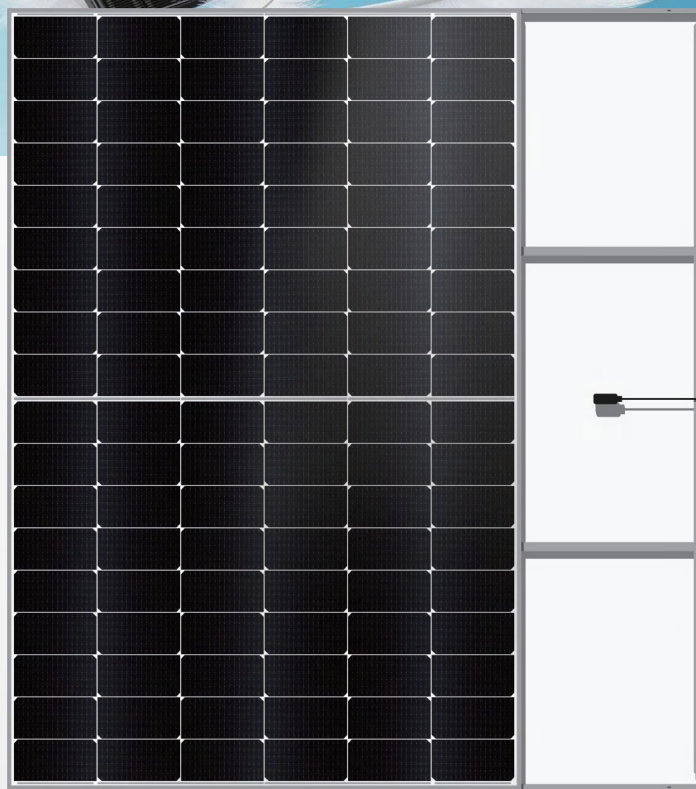
Better Weather Adaptability

Excellent low light performance, lower temperature coefficients and power loss under high temperature.



Lower Power Attenuation

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



IEC 61215:2021

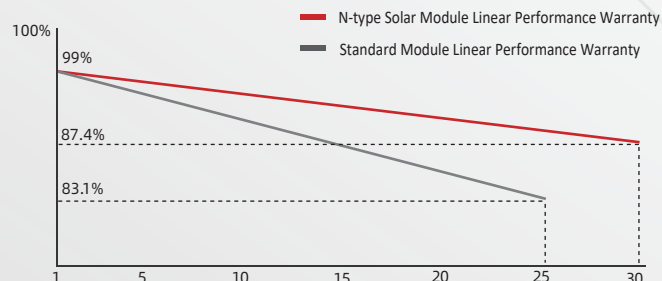
IEC 61730:2023

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



12-year product warranty



25-year linear power output warranty

HEADQUARTER: HORAY SOLAR CO., LTD.

GLOBAL MARKETING AND SERVICE: HORAY SOLAR GMBH

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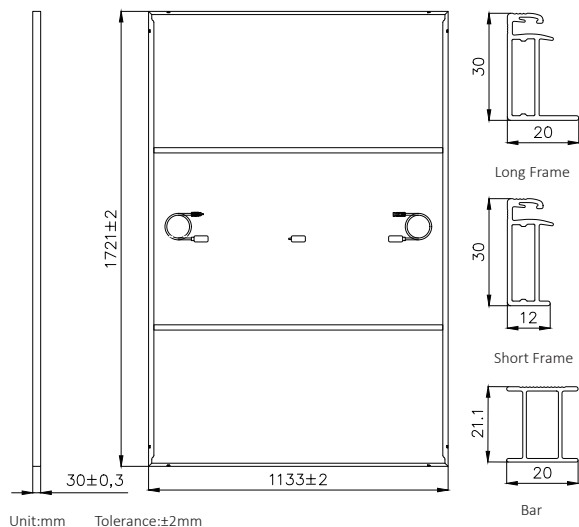
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HL 182-108 TC 1.6 *Lite*



MECHANICAL DIAGRAMS

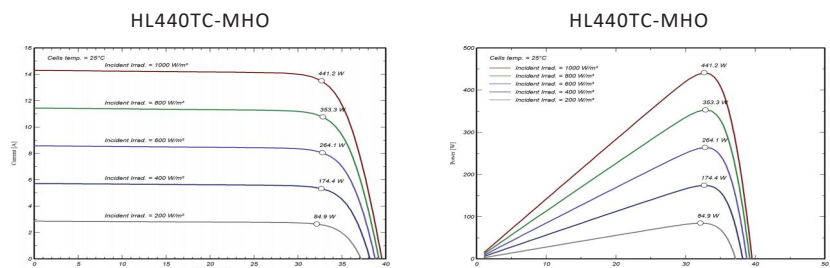


Unit:mm Tolerance:±2mm

MECHANICAL PARAMETERS

Weight	14.2kg
Dimension	1721×1133×30mm
Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm ² , ±300mm (length can be customized)
Connector	MC4 compatible
Glass	1.6mm high transmittance tempered glass
Frame	Anodized aluminum alloy frame
Packaging	36pcs per pallet/936pcs per 40'HC

MECHANICAL PARAMETERS



ELECTRICAL CHARACTERISTICS AT STC

Module Type	HL425TC-MHO	HL430TC-MHO	HL435TC-MHO	HL440TC-MHO
Testing Condition	STC	STC	STC	STC
Maximum Power(Pmax/W)	425	430	435	440
Open Circuit Voltage(Voc/V)	38.59	38.72	38.85	38.98
Short Circuit Current(Isc/A)	14.17	14.25	14.33	14.41
Maximum Power Voltage(Vmp/V)	32.15	32.33	32.51	32.69
Maximum Power Current(Imp/A)	13.22	13.30	13.38	13.46
Module Efficiency(%)	21.8	22.1	22.3	22.5

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

ELECTRICAL CHARACTERISTICS AT NMOT

Module Type	HL425TC-MHO	HL430TC-MHO	HL435TC-MHO	HL440TC-MHO
Testing Condition	NMOT	NMOT	NMOT	NMOT
Maximum Power(Pmax/W)	326	329	333	337
Open Circuit Voltage(Voc/V)	36.70	36.80	36.90	37.00
Short Circuit Current(Isc/A)	11.42	11.49	11.55	11.62
Maximum Power Voltage(Vmp/V)	30.10	30.20	30.40	30.50
Maximum Power Current(Imp/A)	10.82	10.89	10.96	11.04

* Nominal Module Operating Temperature (NMOT): Irradiance 800W/m², AM 1.5, ambient temperature 20°C, wind speed 1 m/s. 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	25A
Nominal Module Operating Temperature [T98]max	45±2°C ≤70°C
Protection Class	Class II
Fire Rating	IEC Class C

MECHANICAL LOADING

Front Side Maximum Static Loading	3600Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

TEMPERATURE RATINGS (STC)

Temperature Coefficient of Isc	+0.048%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Pmax	-0.35%/°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.
Version number: HL182-TC-2026-A1



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