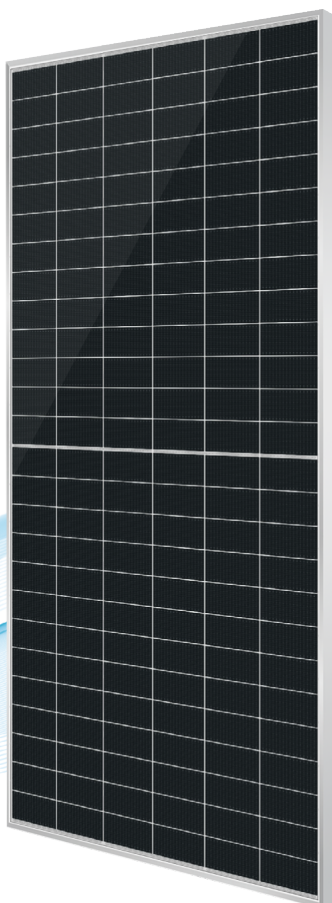


HD HYUNDAI SOLAR MODULE

NJ Series

Premium N-Type TOPCon Module

HiN-T625NJ | HiN-T630NJ | HiN-T635NJ | HiN-T640NJ | HiN-T645NJ



23.07%
High Efficiency



High-End
TOPCon
Technology



Higher
Bifaciality



Long-Term
Reliability



Compatible
with Carport
Applications



For Commercial
& Utility
Applications

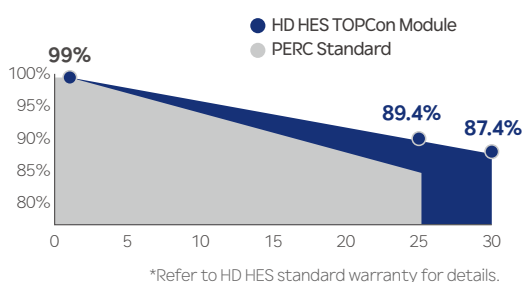
HD Hyundai's Warranty Provisions

12
YEARS

- 12-Year Product Warranty
- Materials and workmanship

30
YEARS

- 30-Year Performance Warranty
- First year degradation: 1%
- Linear warranty after initial year: with 0.4%p annual degradation, 87.4% is guaranteed up to 30years



Certification



- ISO 9001 : Quality management systems
- ISO 14001 : Environmental management systems
- ISO 45001 : Occupational health and safety management systems
- UL 61730: Photovoltaic (PV) module safety qualification (CSA)
- IEC 61701: Salt mist corrosion testing
- IEC 62716: Ammonia corrosion testing
- IEC 62804: Potential Induced Degradation (PID) testing
- IEC 60068-2-68: Sand and dust testing for environmental durability

Electrical Characteristics

HiN-TxxxNJ		HiN-T625NJ		HiN-T630NJ		HiN-T635NJ		HiN-T640NJ		HiN-T645NJ	
Item	Unit	BNPI**		BNPI		BNPI		BNPI		BNPI	
Nominal output (Pmax)	W	625	693	630	698	635	704	640	709	645	715
Open circuit voltage (Voc)	V	55.7	55.7	55.9	55.9	56.1	56.1	56.3	56.3	56.5	56.5
Short circuit current (Isc)	A	14.26	15.80	14.31	15.86	14.36	15.91	14.41	15.97	14.46	16.02
Voltage at Pmax (Vmpp)	V	46.3	46.3	46.5	46.5	46.7	46.7	46.9	46.9	47.1	47.1
Current at Pmax (Impp)	A	13.50	14.96	13.55	15.01	13.60	15.07	13.65	15.12	13.70	15.18
Module efficiency	%	22.26		22.54		22.72		22.90		23.07	
Power Class Sorting	W	0 ~ +5									
Temperature coefficient of Pmax	%/K	-0.30									
Temperature coefficient of Voc	%/K	-0.25									
Temperature coefficient of Isc	%/K	0.046									
Bifaciality	%	80±10%									

**The electrical properties of BNPI are measured under the irradiance corresponding to 1000 W/m² on the module front and 135 W/m² on the module rear.

Additional Power Gain from rear side					
Pmpp gain	Pmpp [W]	Vmpp [V]	I _{mp} [A]	Voc [V]	Isc [A]
5%	667	46.70	14.28	56.10	15.08
15%	730	46.70	15.64	56.10	16.51
25%	794	46.70	17.00	56.10	17.95

*Electrical characteristics with different rear power gain (reference to 635W)

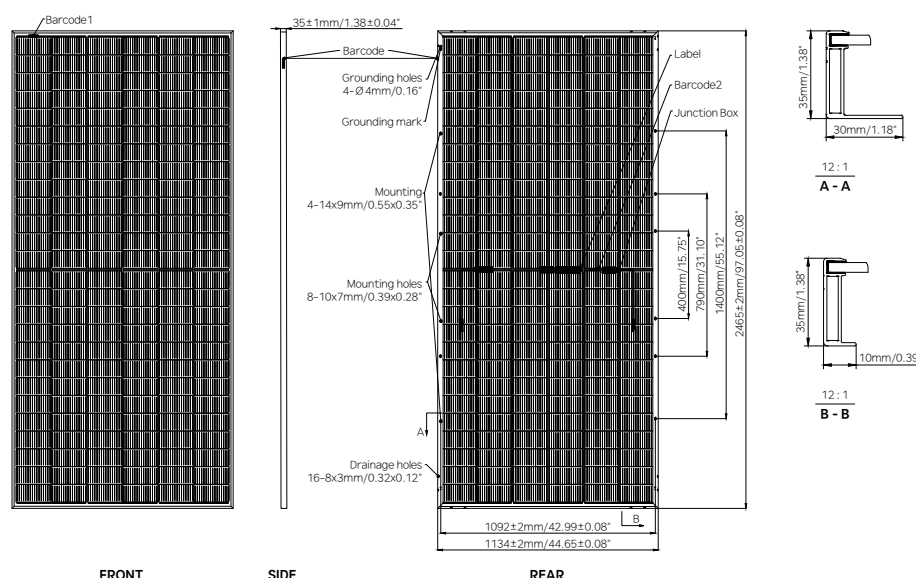
Mechanical Characteristics

Dimensions	2,465mm (L) x 1,134mm (W) x 35mm (H) (97.1in x 44.6in x 1.4in)
Weight	34.5 kg (76.1bs)
Solar Cells	N-Type TOPCon, 156 (6x26) monocrystalline 16BB half-cut bifacial cells
Output Cables	Cable : (+)1,400mm(55.1in), (-) 1,400mm(55.1in) / Customized length available Connector : MC4 Genuine or Compatible, IP68
Junction Box	3-part, 3 bypass diodes, IP68 rated
Construction	Front : 2.0mm(0.08in) semi-tempered solar glass with high transmittance and anti-reflective coating Rear : 2.0mm(0.08in) semi-tempered solar glass
Frame	Anodized aluminum alloy

Shipping Configurations

Packing Direction	Vertical	Packing pallet weight (kg)	1,105
Container Size (HC)	40'	Modules Per Pallet (pcs)	31
Pallets Per Container	16	Modules Per Container (pcs)	496

Module Diagram (unit : mm)



Installation Safety Guide

- Only qualified personnel should install or perform maintenance.
- Be aware of dangerous high DC voltage.
- Do not handle or install modules when they are wet.

Nominal Module Operation Temperature	44°C ± 2°C
Operating Temperature	-40°C~+85°C
Maximum System Voltage	DC 1,500 V
Maximum Reverse Current	30A
Maximum Test Load	Front 5,400Pa Rear 2,400Pa
Fire Performance	Type 29

I-V Curves (HiN-T635NJ)

