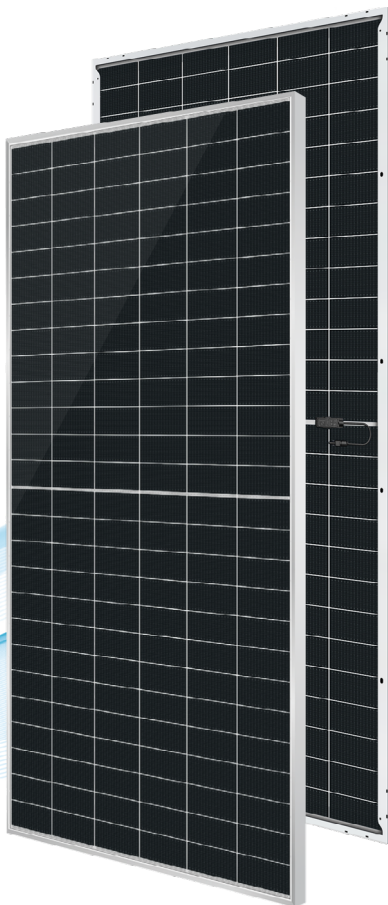


HD HYUNDAI SOLAR MODULE

NJ Series

Premium N-Type TOPCon Module

HiS-T630NJ | HiS-T635NJ | HiS-T640NJ



22.90%
High Efficiency



High-End
TOPCon
Technology



Higher
Bifaciality



Long-Term
Reliability



For Commercial
& Utility
Applications

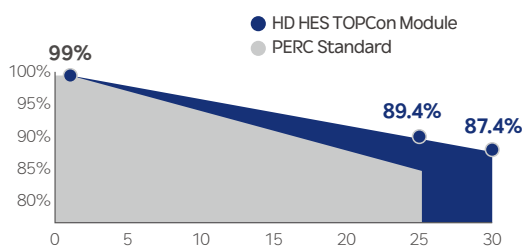
HD Hyundai's Warranty Provisions

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



*Refer to HD HES standard warranty for details.

Certification

UL **US LISTED**
PHOTOVOLTAIC MODULES OVER 600 VOLTS
E325005

CE

IEC

- UL 61215 / UL 61730 / IEC 61215 / IEC 61730 Certified
- ISO 9001 : Quality management systems
- ISO 14001 : Environmental management systems
- ISO 45001 : Occupational health and safety management systems

Electrical Characteristics

HiS-TxxxNJ		HiS-T630NJ		HiS-T635NJ		HiS-T640NJ	
Item	Unit	BNPI		BNPI		BNPI	
Nominal output (Pmax)	W	630	696	635	701	640	706
Open circuit voltage (Voc)	V	57.36	57.58	57.56	57.78	57.77	57.99
Short circuit current (Isc)	A	13.90	15.40	13.98	15.49	14.06	15.58
Voltage at Pmax (Vmpp)	V	47.41	47.59	47.57	47.70	47.74	47.81
Current at Pmax (Impp)	A	13.29	14.63	13.35	14.70	13.41	14.77
Module efficiency	%	22.54		22.72		22.90	
Power Class Sorting	W	0 ~ +5					
Temperature coefficient of Pmax	%/K	-0.290					
Temperature coefficient of Voc	%/K	-0.250					
Temperature coefficient of Isc	%/K	0.043					
Bifaciality	%	80±5					

*STC : Irradiance 1,000 W/m², cell temperature 25°C, AM=1.5 / Test uncertainty for Pmax ±3%; Isc; Voc ±5%
 **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]	Impp[A]	Voc[V]	Isc[A]
5%	672	47.74	14.08	57.77	14.77
15%	736	47.74	15.42	57.77	16.17
25%	800	47.74	16.76	57.77	17.58

*Electrical characteristics with different rear power gain (reference to 640W)

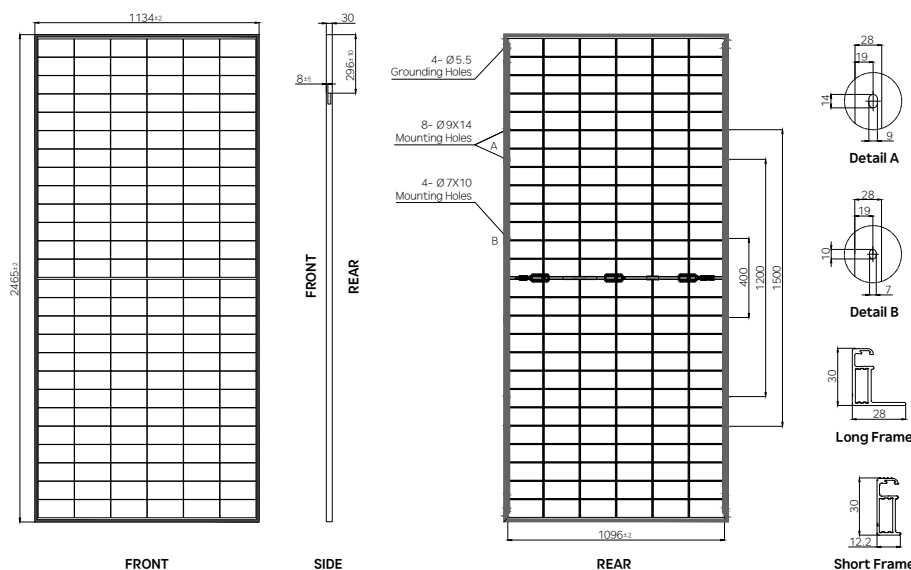
Mechanical Characteristics

Dimensions	2,465mm (L) x 1,134mm (W) x 30mm (H) (97.0in x 44.6in x 1.2in)
Weight	34.7 kg (76.5lbs)
Solar Cells	N-Type TOPCon, 156 (6x26) monocrystalline 16BB half-cut bifacial cells
Output Cables	Cable : (+)500mm(19.7in), (-)300mm(11.8in) / Customized length available Connector : Stäubli MC4 genuine Connector / 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

Container Size (HC)	40'	Modules Per Pallet (pcs)	36
Pallets Per Container	14	Modules Per Container (pcs)	504

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	41°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 (HiS-T640NJ)

