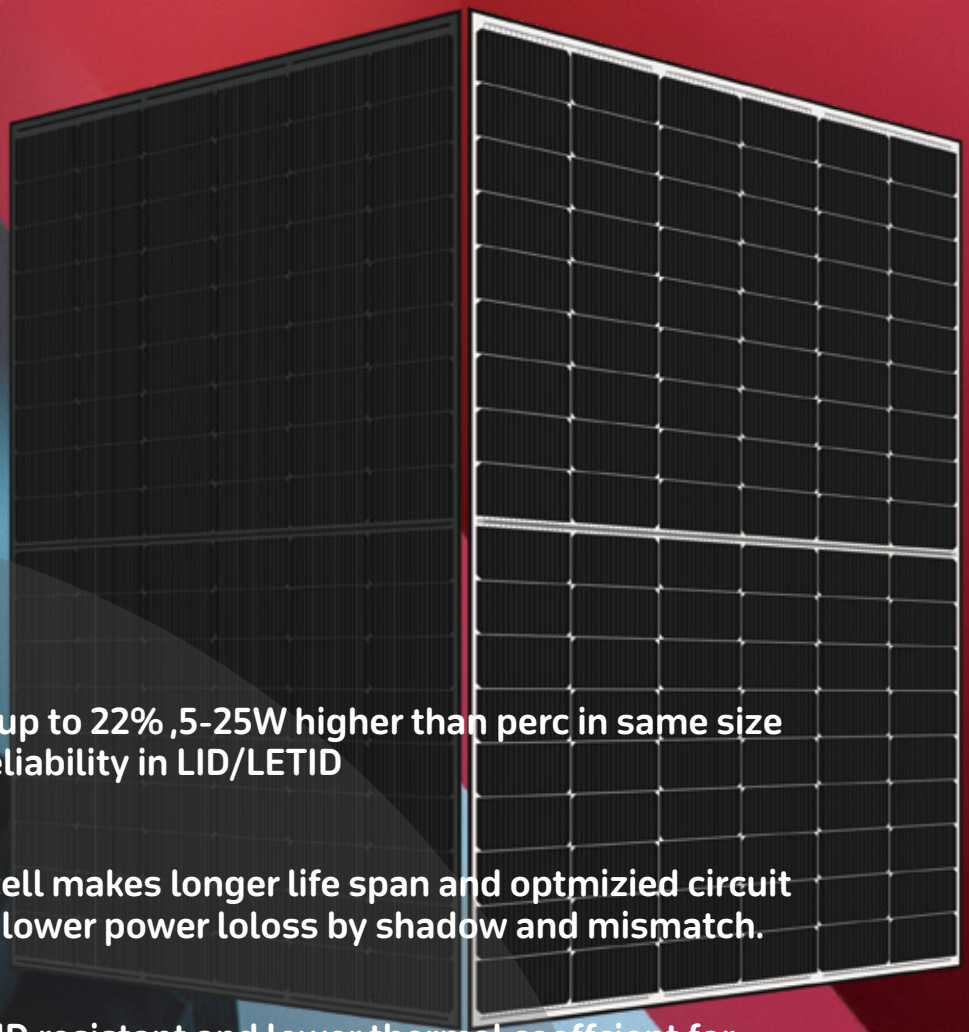
TOPCON 440W

Mono N-type half cut module



- module up to 22% ,5-25W higher than perc in same size
  better reliability in LID/LETID
- N-type cell makes longer life span and optmizied circuit
  to make lower power loloss by shadow and mismatch.
- highly PID resistant and lower thermal coeffcient for
  higher power gerneration
- 12years products material and workmanship
  30years linear power output warranty

Hanover Solar

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Electrical Characteristics

Module Type	HS440-54-182 TC	
Testing Condition	STC	NOCT
Maximum Power (Pmax/W)	440	332
Open Circuit Voltage (Voe/V)	38.89	36.94
Short Circuit Current (Isc/A)	14.38	11.62
Voltage at Maximum Power (Vmp/V)	32.28	30.01
Current at Maximum Power (Imp/A)	13.64	11.07
Module Efficiency(%)	22.53	

STC: AM1.5 1000W/m² 25℃ NOCT: AM1.5 800W/m² 20℃ 1m/s Test uncertainty for Pmax:±3%

Mechanical Parameters

Cell Orientation	108 (6X18)
Junction Box	IP68, three diodes
Output Cable	4.0mm2 400/400mm (custmized available)
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.8kg
Dimension	1722×1134×30mm
Packaging	36pcs per pallet
Container	216 pcs per 20'GP / 936 pcs per 40'HC

Temperature Coefficient

Temperature Coefficient of Isc	+0.060%/°C
Temperature Coefficient of Voe	-0.300%/°C
Temperature Coefficient of Pmax	-0.390%/°C

Mechanical Loading

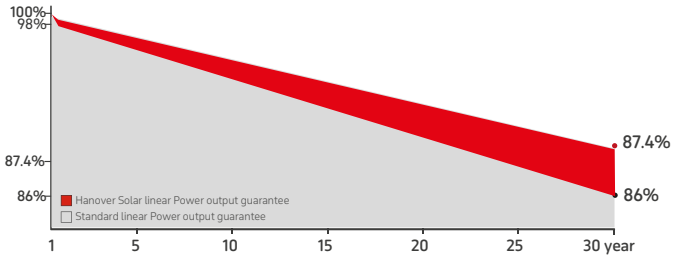
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	C25mm Hailstone at the speed of 23m/s

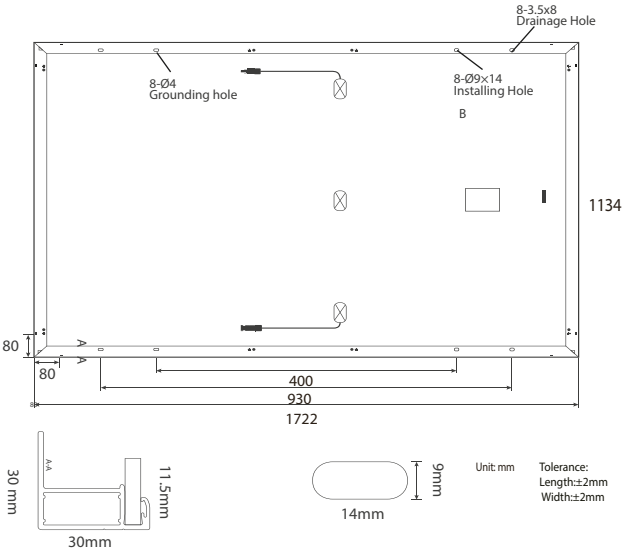
Operating Parameters

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~3%
Voe and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	25A
NOCT	44±2°C
Protection Class	Class II
Fire Rating	IEC Class C

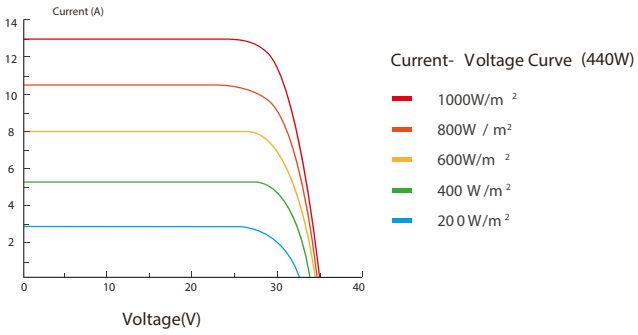
TÜV Rheinland INMETRO ISO CE PID

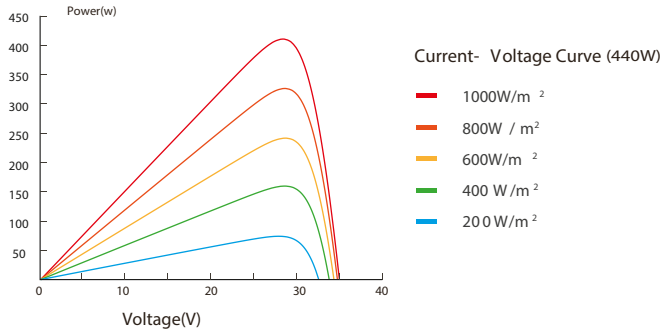
Additional Value





I -V Curve





CAUTION: read the installation instruction before using the product.

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