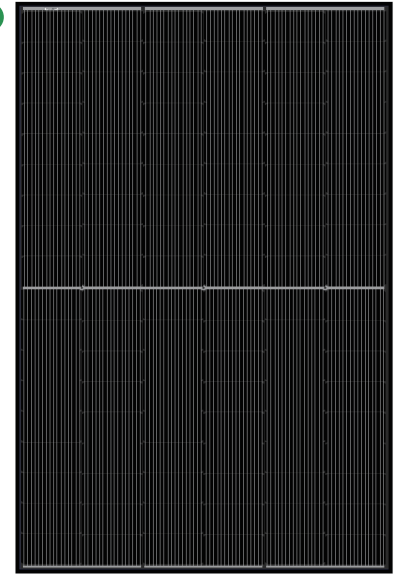


# NESE 435-54THB-M10

16BB HALF-CELL N-TYPE TOPCON BIFACIAL  
DOUBLE GLASS MONOCRYSTALLINE PV MODULE



## KEY FEATURES



### High efficiency TOPCon

A high efficiency 182 (M10) N-Type TOPCon solar cell with 16 busbars technology to ensure the efficiency of the solar module up to 22.28% and stable operation.



### Bifacial power generation

Increases 10-30% power generation revenue.



### Wind/Snow load

Wind load 2400 pa, snow load 5400 pa.



### Pid free

Excellent Anti-PID performance, minimized the degradation of power.



### Excellent performance with weak light

More power output with a weak light condition through advanced glass and solar cells.

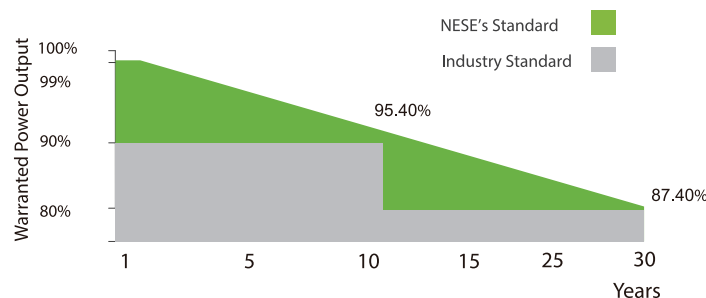


### Resistance of extreme environment conditions

High salt mist and ammonia resistance certified by tuv.

## LINEAR PERFORMANCE WARRANTY

12 YEARS PRODUCT WARRANTY. 30 YEARS LINEAR POWER WARRANTY.



## MANAGEMENT SYSTEM CERTIFICATES

ISO 9001/ISO 14001/ISO 45001

SA 8000/ISO 50001/ISO 37001

## PRODUCT CERTIFICATES

IEC 61215/IEC 61730:VDE/CE/CEC AU

UL 61730: CSA

IEC 61701/IEC 62716/IEC 62804

## ENVIRONMENT CERTIFICATES

ISO 14064/ISO 14067

## INSURED BY

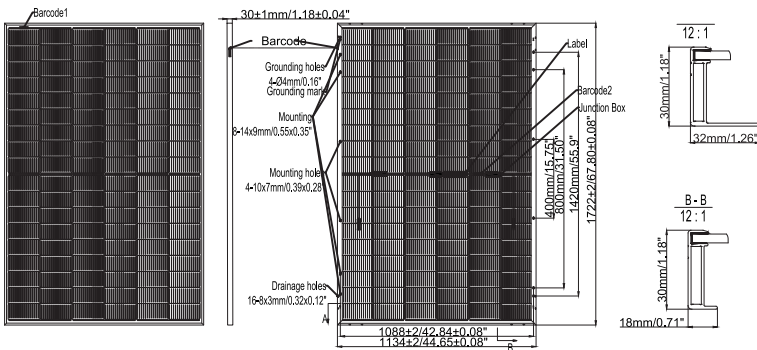


# SPECIFICATIONS

Module type	NESE 415-54THB-M10		NESE 420-54THB-M10		NESE 425-54THB-M10		NESE 430-54THB-M10		NESE 435-54THB-M10	
	STC	(NOCT)	STC	(NOCT)	STC	(NOCT)	STC	(NOCT)	STC	(NOCT)
Maximum power (Pmax)	415Wp	313Wp	420Wp	317Wp	425Wp	320Wp	430Wp	325Wp	435Wp	329Wp
Maximum power voltage (Vmp)	31.3V	29.4V	31.5V	29.6V	31.7V	29.8V	31.9V	30.0V	32.1V	30.2V
Maximum power current (Imp)	13.26A	10.64A	13.34A	10.70A	13.41A	10.76A	13.48A	10.82A	13.55A	10.88A
Open-circuit voltage (Voc)	37.8V	35.7V	38.0V	35.9V	38.2V	36.0V	38.4V	36.2V	38.6V	36.4V
Short-circuit current (Isc)	14.04A	11.33A	14.11A	11.39A	14.18A	11.44A	14.25A	11,50A	14.32A	11,56A
Module efficiency stc (%)	21.25%		21.51%		21.76%		22.02%		22.28%	
Operating temperature(°C)	-40°C ~ 85°C									

ELECTRICAL CHARACTERISTICS AT BNPI(BSI)										
Front power Pmax/W	415		420		425		430		435	
Total power Pmax/W	460 (515)		465 (521)		471 (527)		476 (533)		482 (539)	
Vmp/V(Total)	31.3 (31.4)		31.5 (31.6)		31.7 (31.8)		31.9 (32.0)		32.1 (32.2)	
Imp/A(Total)	14.69 (16.44)		14.78 (16.54)		14.86 (16.63)		14.94 (16.72)		15.01 (16.80)	
Voc/V(Total)	37.8 (37.9)		38.0 (38.1)		38.2 (38.3)		38.4 (38.5)		38.6 (38.7)	
Isc/A(Total)	15.56 (17.41)		15.63 (17.50)		15.71 (17.58)		15.79 (17.67)		15.87 (17.76)	

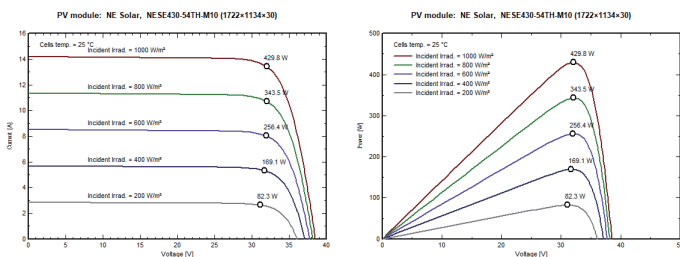
## ENGINEERING DRAWING



## TEMPERATURE RATINGS MATERIAL CHARACTERISTICS

NOCT	44±2°C	Number of cell	108 (6*18)
Temperature coefficients of Pmax	-0.30%/°C	Dimensions	1722*1134*30mm 67.80"*44.65"*1.18"
Temperature coefficients of Voc	-0.25%/°C	Weight	24.5 +/-1.0kg 50.01 +/-2.21lb
Temperature coefficients of Isc	+0.046%/°C	Front glass	2.0mm+2.0mm heat strengthened glass
Refer. Bifacial Factor	80±10%	Frame	Anodized aluminium alloy

## IV CURVES OF THE PV MODULES



Electrical performance vs Incident Irradiance Current-voltage & power-voltage curves (430W)

## WORKING CONDITIONS

Maximum system voltage	1000/1500 VDC	Junction box	Ip68,3 diodes
		Cables	Length: 350mm/13.78" or Customized, 12 AWG

Maximum series fuse rating 30A Connectors MC4-Compatible

Module Fire Performance Type 29/Class C

## PACKAGING CONFIGURATION

40HQ	936PCS
Pallet Dimension	1740*1120*1271mm 68.50"*44.09"*50.04"
Pallets in one Container	26Pallets
Modules in one Pallet	36PCS