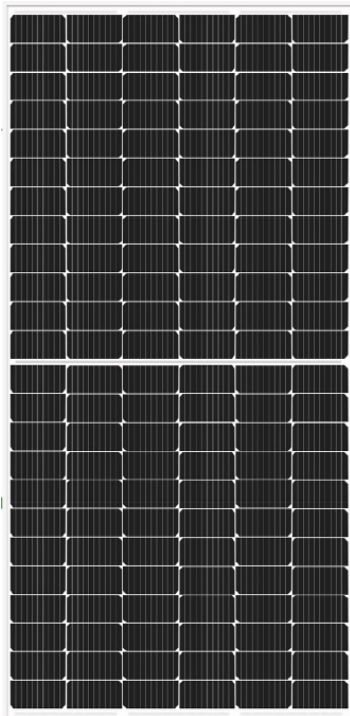


# TPL SOLAR MODULE MONO PERC HALF-CELL

9BB 166MM CELL



TPL M-144HC Series 430W-460W



EU Brand & Warranty



High Efficiency

High module conversion efficiency (up to 20.67%), through innovative manufacturing technology.



Low-Light Performance

Advanced glass and solar cell surface texturing allow for excellent performance in low-light environments



Severe Weather Resilience

Certified to withstand : wind Load (2400 Pascal) And Snow Load (5400 Pascal)



9 Busbar Solar Cell

9 busbar solar cell adopts new technology to improve the efficiency of modules , offers a better aesthetic appearance.



## Superior Quality Control

Full automatic production line  
ISO9001:2008 quality management system  
100% three times EL and appearance inspection



## Plus tolerance

0-+5W positive power tolerance guarantees the highest system efficiency and yield stability



## Performance Guarantee

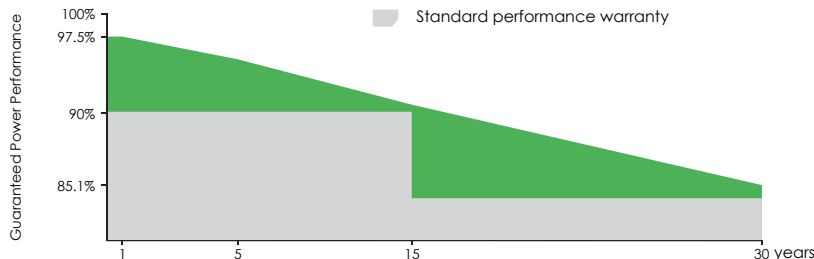
With the linear performance guarantee of 30 years and a product warranty of 25 years, TPL Solar guarantees highest investment security and warranty claims.



## Certificates

TPL Solar modules are CE and TUV certified. Meet Australia CEC standard and on CEC list. Fire safety Class C

## Performance Assurance



IEC 61215, IEC 61730

ISO 9001: 2015 Quality management systems

ISO 14001: 2015 Environmental management systems

OHSAS 18001: 2007 Occupational health and safety management systems





# TECHNICAL DATA MONO PERC HALF-CELL TPL M-144HC Series 430W-460W

## ELECTRICAL DATA

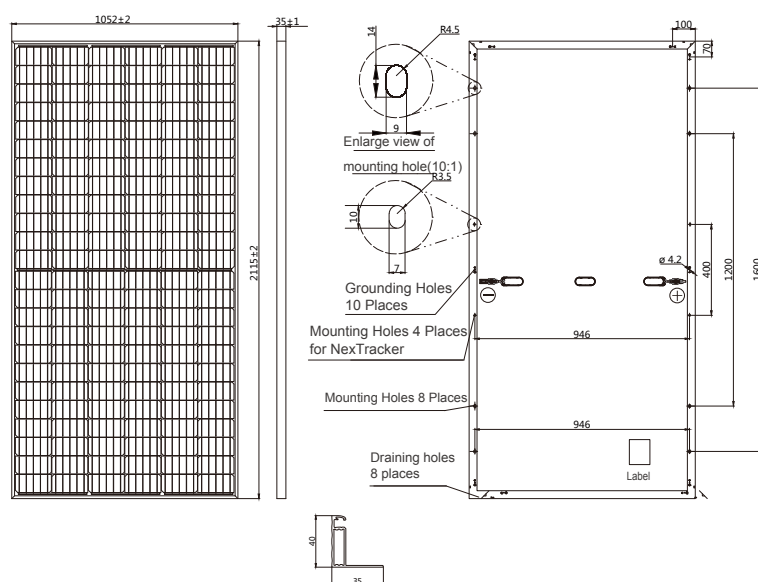
		TPL-435M-144HC		TPL-440M-144HC		TPL-445M-144HC		TPL-450M-144HC		TPL-455M-144HC		TPL-460M-144HC	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal power	Pm (Wp)	435Wp	322Wp	440Wp	326Wp	445Wp	330Wp	450Wp	333Wp	455Wp	337Wp	460Wp	341Wp
Voltage at max power	Vmp (V)	40.74V	37.7V	40.82V	37.9V	40.95V	38.1V	41.06V	38.3V	41.16V	38.6V	41.25V	38.9V
Current at max power	Imp (A)	10.68A	8.55A	10.79A	8.61A	10.87A	8.67A	10.96A	8.70A	11.06A	8.73A	11.15A	8.77A
Open circuit voltage	Voc (V)	49.43V	46.1V	49.62V	46.3V	49.81V	46.5V	49.95V	46.7V	50.12V	46.9V	50.28V	47.1V
Short-circuit current	Isc (A)	11.28A	9.06A	11.36A	9.11A	11.41A	9.16A	11.52A	9.21A	11.63A	9.26A	11.74A	9.31A
Module efficiency	(%)	19.53%		19.77%		20.03%		20.22%		20.45%		20.67%	
System Voltage	(V)	1500											
Temp. coefficient Voc	(%; °C)	-0.28											
Temp. coefficient Isc	(%; °C)	0.06											
Temp. coefficient Pm	(%; °C)	-0.36											
Operating temp.	(°C)	-40 to +85											
NOCT	(°C)	45±2											

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

## TECHNICAL DATA

Junction box	3 bypass diodes, IP68
Wire cross section (Ø, mm <sup>2</sup> )	4.0
Cable length (mm)	Anode 290mm Cathode 145mm
Connector type	QC 4.10-35
Dimensions (L x W x H, mm)	2115x1052x35mm
Weight (kg)	24.0
Cell dimensions (mm)	166 x 166
No of cells / assembly	144 / 6x24
Type of cells	Mono-PERC
Hail resistance	Max. Ø 28 mm at 23 m/s
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

## DIMENSIONS



## I-V CURVE

