



## MAP-144-H MONOCRYSTALLINE MODULE

### Product Features:



Ultra low performance degradation



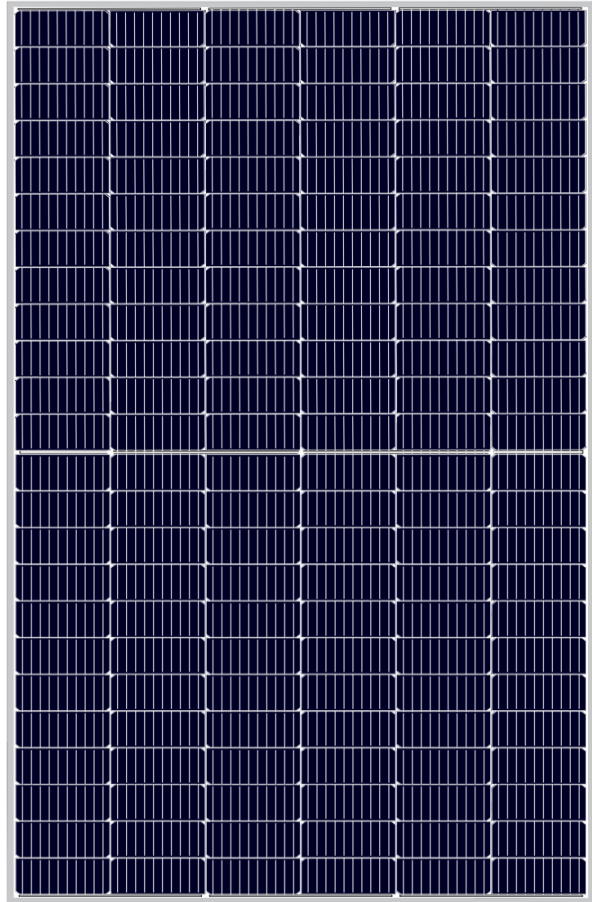
Maximum power up to 560W+



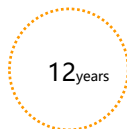
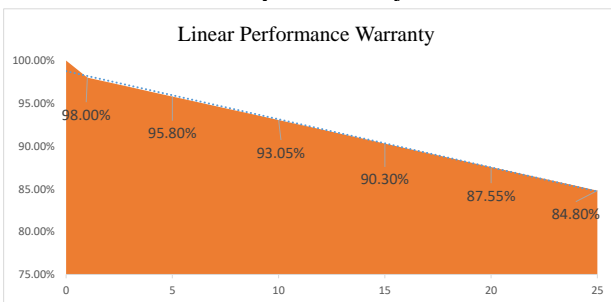
High module quality ensure long-term reliability



Excellent outdoor power generation performance



### Extra Linear Power Output Warranty



12years Materials and Processing Warranty



25years Extra Linear Power Output Warranty

### System Certifications:

- ISO9001: Quality Management System
- ISO14001: Environmental Management System
- ISO45001: Occupational Health and Safety Management System

### Product Certification



Tongwei Solar Energy (Hefei) Co., LTD  
 Technical specification of the TW525~560 MAP-144-H

Balerina-GreenEnergy s.r.o.  
 Přestavlká 1447  
 295 01 Mnichovo Hradiště  
 Česká republika

Tel.: 326 773 391  
 E-mail: info@balerina-greenenergy.cz  
 www.balerina-greenenergy.cz





#### Electrical Data (STC)

PRODUCT: TW\*\*\*MAP-144-H

Maximum Power- $P_{MAX}$ (Wp):	525	530	535	540	545	550	555	560
Open Circuit Voltage- $V_{OC}$ (V)	49.05	49.28	49.51	49.75	49.98	50.22	50.45	50.68
Short Circuit Current- $I_{SC}$ (A)	13.53	13.57	13.60	13.63	13.66	13.70	13.73	13.76
Maximum Power Voltage- $V_{MPP}$ (V)	41.21	41.48	41.77	42.06	42.35	42.64	42.93	43.22
Maximum Power Current- $I_{MPP}$ (A)	12.74	12.78	12.81	12.84	12.87	12.90	12.93	12.96
Module Efficiency $\eta$ (%)	20.3	20.5	20.7	20.9	21.1	21.3	21.5	21.7

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass 1.5, Measuring tolerance: ±3%

#### Electrical Data (NOCT)

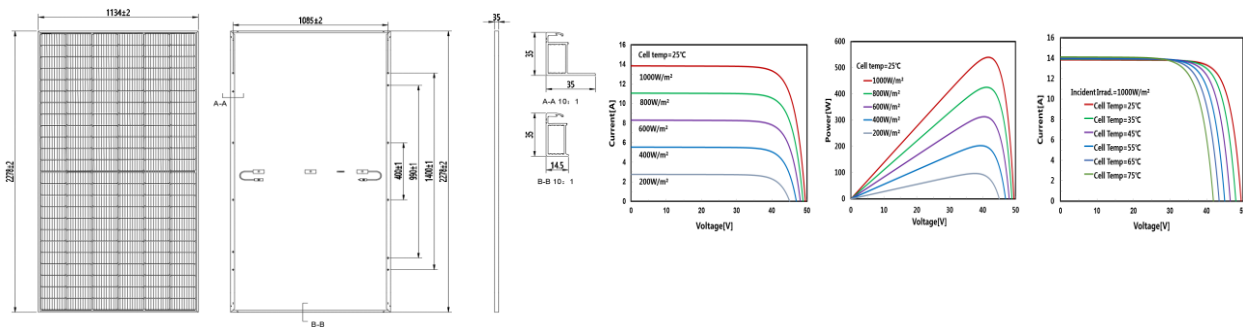
Maximum Power- $P_{MAX}$ (Wp)	397.2	401.1	404.8	408.6	412.4	416.2	420.0	423.8
Open Circuit Voltage- $V_{OC}$ (V)	46.30	46.52	46.74	46.96	47.18	47.40	47.62	47.85
Short Circuit Current- $I_{SC}$ (A)	10.84	10.86	10.89	10.92	10.94	10.97	10.99	11.02
Maximum Power Voltage- $V_{MPP}$ (V)	38.22	38.47	38.74	39.01	39.28	39.55	39.82	40.09
Maximum Power Current- $I_{MPP}$ (A)	10.39	10.43	10.45	10.47	10.50	10.52	10.55	10.57

NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20 °C, Wind Speed 1m/s

#### Mechanical Data

Solar Cells	Monocrystalline
No. of cells	144 Cells[6×24]
Module Dimensions	2278±2×1134±2×35mm
Weight	27.8kg
Glass	3.2mm, High Transmission, AR Coated Heat Strengthened Glass
Backsheet	White
Frame	Anodized Aluminium Alloy
J-Box	IP 68 rated, Three diodes
Cables	4.0 mm <sup>2</sup> , Portrait: 280/280mm
Connector	Original MC4
Wind/Snow Load	2400Pa/5400Pa
Modules per box	31 pcs per pallet
Packaging	155 pcs per 20HC, 620 pcs per 40HC

#### Dimensions Of PV Module(mm)



**CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.**

Tongwei Solar Energy (Hefei) Co., LTD

Technical specification of the TW525~560 MAP-144-H

#### TEMPERATURE RATINGS

Temperature Coefficient of $P_{MAX}$	-0.35%/°C
Temperature Coefficient of $V_{OC}$	-0.27%/°C
Temperature Coefficient of $I_{SC}$	+0.045%/°C
NOCT(Nominal Operating Cell Temperature)	43±2°C

#### MAXIMUM RATINGS

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A
Power Tolerance- $P_{MAX}$ (W)	0~+5W

