

# TW\*\*\*MAP-108-H MONOCRYSTALLINE MODULE

## Product Features:



Ultra low performance degradation



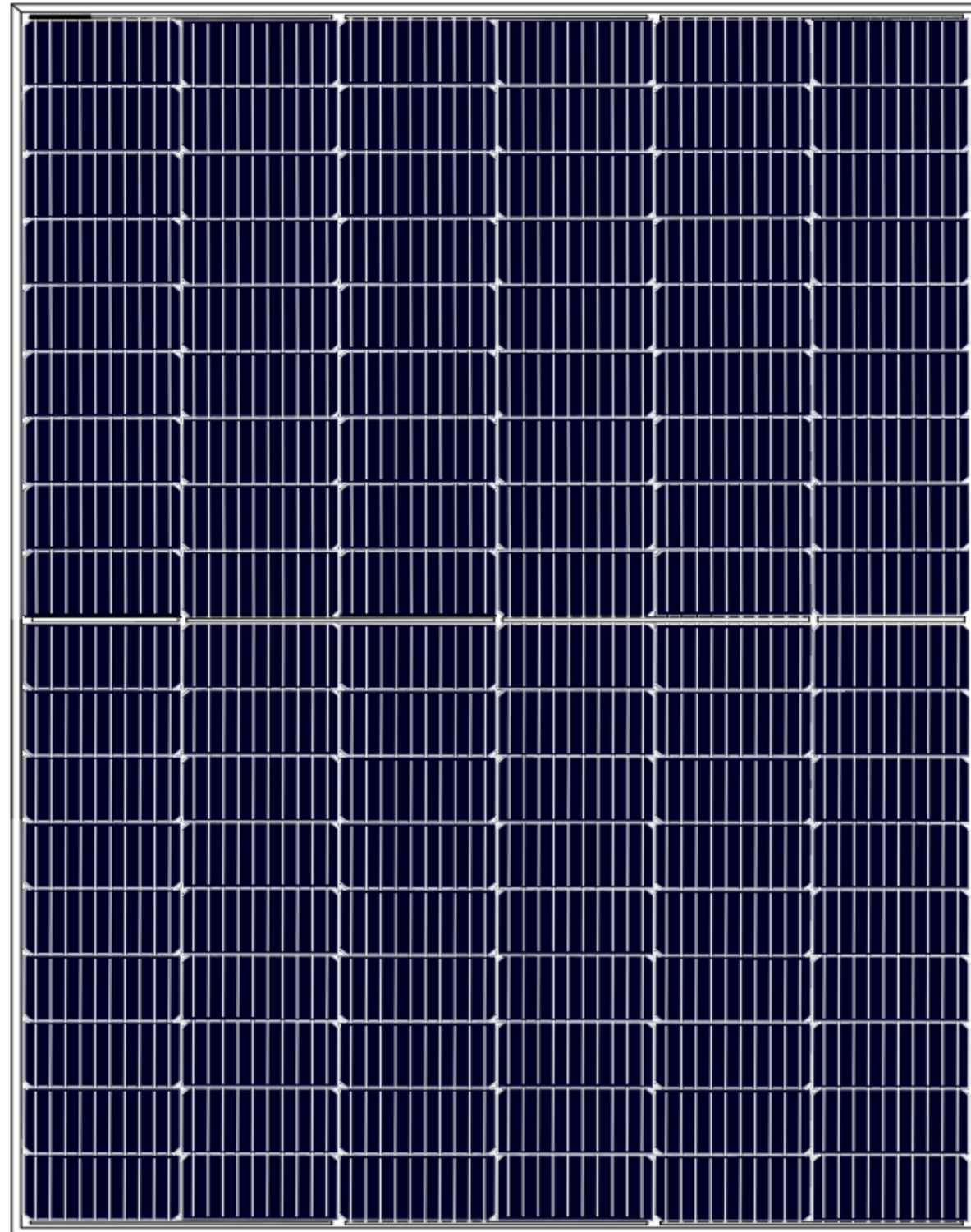
Maximum power up to 420W+



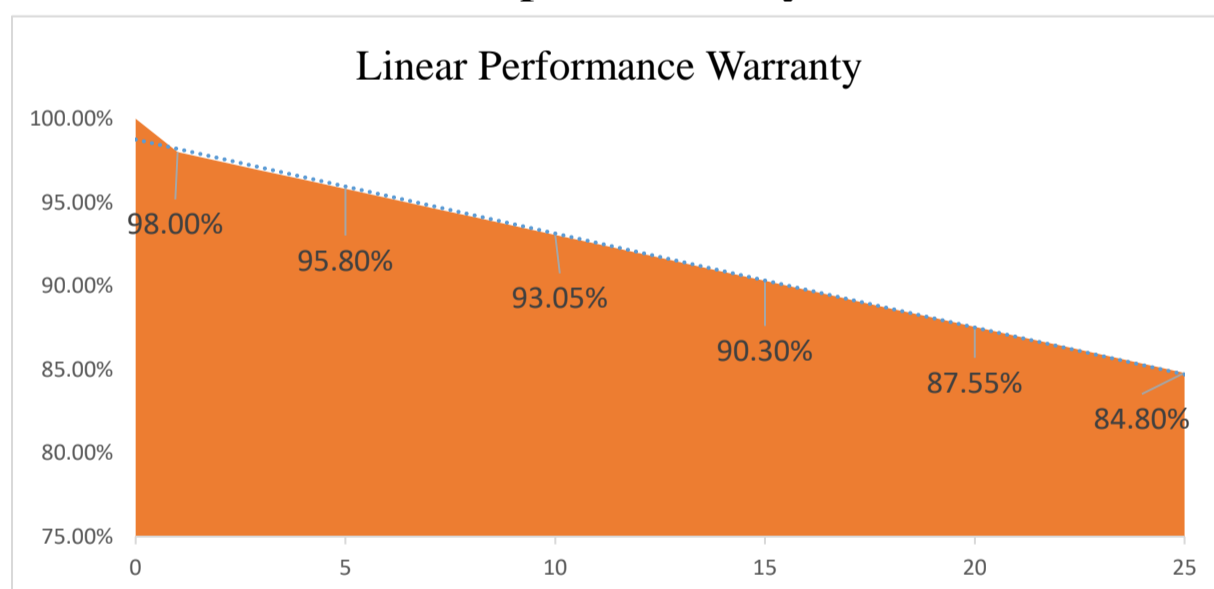
High module quality ensure long-term reliability



Excellent outdoor power generation performance



## Extra Linear Power Output Warranty



12years Materials and Processing Warranty

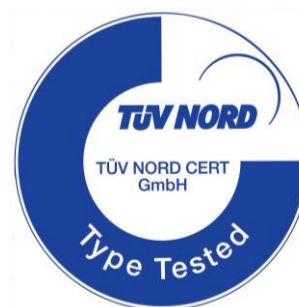


25years Extra Linear Power Output Warranty

## System Certifications:

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

## Product Certification



Electrical Data (STC)				
	TW405	TW410	TW415	TW420
Module Type:	MAP-108-H	MAP-108-H	MAP-108-H	MAP-108-H
Maximum Power- $P_{MAX}$ (Wp):	405	410	415	420
Open Circuit Voltage- $V_{OC}$ (V)	37.55	37.79	38.08	38.32
Short Circuit Current- $I_{SC}$ (A)	13.73	13.81	13.87	13.95
Maximum Power Voltage- $V_{MPP}$ (V)	31.16	31.31	31.46	31.61
Maximum Power Current- $I_{MPP}$ (A)	13.00	13.09	13.19	13.29
Module Efficiency $\eta$ (%)	20.7	21	21.3	21.5

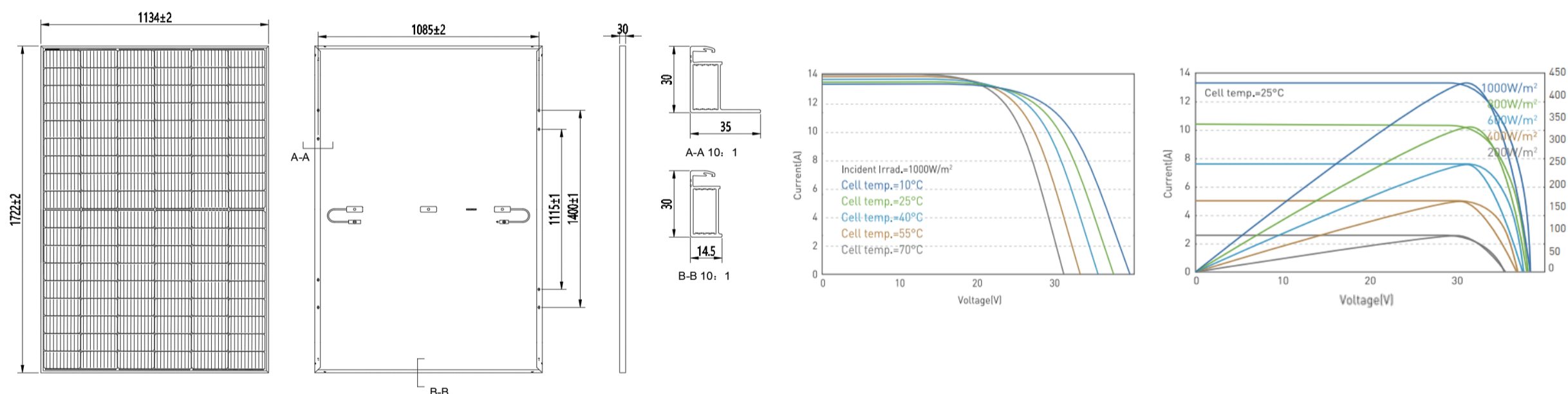
STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass1.5, Measuring tolerance:  $\pm 3\%$

Mechanical Data	
Solar Cells	Monocrystalline
No. of cells	108 Cells[6 $\times$ 18]
Module Dimensions	1722 $\times$ 1134 $\times$ 30mm
Weight	20.5kg
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 C1, Jiangsu Holysun Electronics Technology Co., Ltd. C1, JINZHOU YANGGUANG ENERGY CO., LTD. C2 and LJ-01, Jiangsu Holysun Electronics Technology Co., Ltd. C2xyz (x=blank; y=blank; z=blank); LJ-01x (x=blank), Jiangsu Holysun Electronics Technology Co., Ltd. LSC-R1, LEONI Cable (China) Co., Ltd. PV-KST4-EVO 2/xy_UR; PV-KBT4-EVO 2/xy_UR, Stäubli Electrical Connectors AG PV-KST4-EVO 2A/xy; PV-KBT4-EVO 2A/xy, Stäubli Electrical Connectors AG
Connector	UTXCFabcd; UTXCMabed, Amphenol Technology (Shenzhen) Co., Ltd. SIKE6, ZHEJIANG FOR SOL ENERGY Co., Ltd. FC4-4, ZHEJIANG FOR SOL ENERGY Co., Ltd. PV-JY-0901-3, Yangzhou Langri New Energy technology Co., Ltd. PV-JY-0901-4, Yangzhou Langri New Energy technology Co., Ltd. PV-JY-0901-5, Yangzhou Langri New Energy technology Co., Ltd. Z4S-abcde, Zerun Co., LTD PV-XT101.1, Suzhou Xtong Photovoltaic Technologies Co., Ltd. TS4; TS4-36; TS4-cd (c=1; d=1 or 2), Trina Solar Co., Ltd.
Static Load(Fron/Rear)	5400Pa/2400Pa
Modules per box	36pcs per pallet
Packaging	936pcs per 40'HC

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

MAXIMUM RATINGS	
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A
Power Selection	0~+5W
Fire Safety Class	Class C

### Dimensions Of PV Module(mm)



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