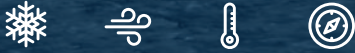


**HC MONO**  
**480 - 500 Watt**



**KEY FEATURES**

Our solar cells offer high conversion efficiency to ensure the highest quality.

Our high performing modules have an industry low tolerance of 0 ~ +5W.

The modules can withstand high wind-pressure, snow loads and extreme temperatures.

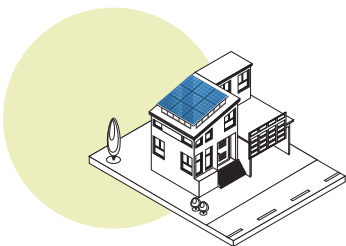
Passed IEC 5400 Pa mechanical loading test  
PID Resistance Available.

**QUALITY AND SAFETY**

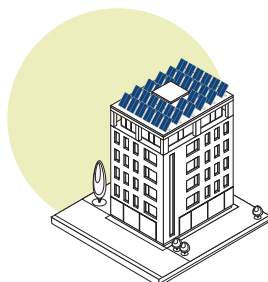
- ⌚ Industry leading power output warranty  
15 years/90%  
30 years/80%
- ⌚ 25-year warranty on materials & workmanship
- 🔥 Fire Rating: Class 1



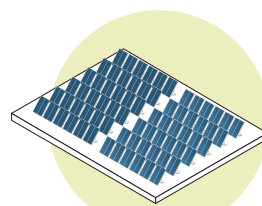
**APPLICATIONS**



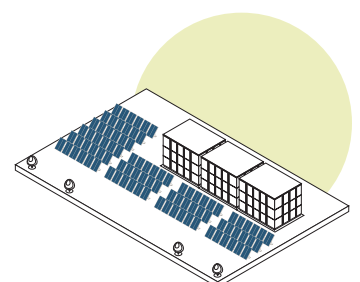
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

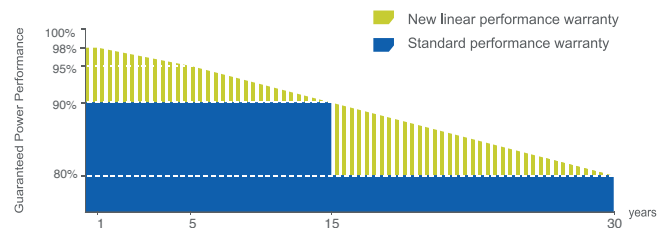


Solar power plants

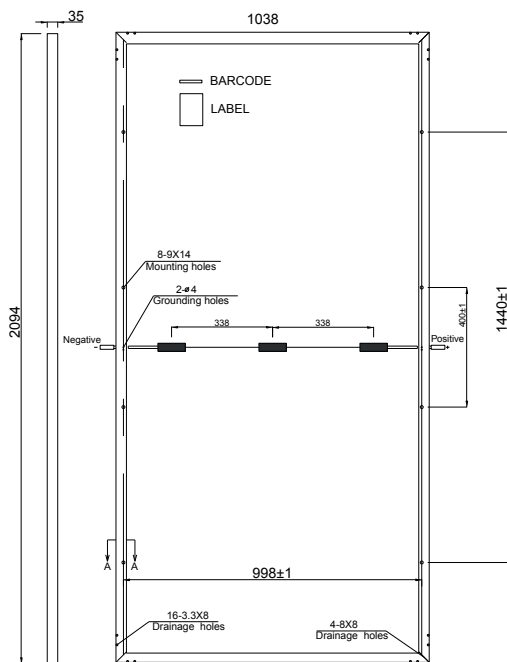


Off-grid systems

**PREMIUM PERFORMANCE WARRANTY**



## ENGINEERING DRAWINGS



## PACKAGING CONFIGURATION

Standard packaging	66 pcs / pallet
Module quantity per 20' container	155pcs
Module quantity per 40' container	726pcs

## SPECIFICATIONS

Module Type	TKA480M-144	TKA485M-144	TKA490M-144	TKA495M-144	TKA500M-144
Maximum Power at STC(Pmax)	480Wp	485Wp	490Wp	495Wp	500Wp
Maximum Power Voltage (Vmp)	42.90V	43.10V	43.30V	43.50V	43.70V
Maximum Power Current (Imp)	11.18A	11.25A	11.32A	11.39A	11.46A
Open-circuit Voltage (Voc)	50.30V	50.50V	50.70V	50.90V	51.10V
Short-circuit Current (Isc)	11.64A	11.70A	11.76A	11.82A	11.88A
Module Efficiency (%)	21.87%	22.10%	22.32%	22.56%	22.78%
Operating Temperature (°C)	-40°C~+85°C				
Maximum system voltage	1500V DC				
Maximum series fuse rating	20A				
Power tolerance	0 ~ +5W				
Temperature coefficients of Pmax	-0.35%/°C				
Temperature coefficients of Voc	-0.28%/°C				
Temperature coefficients of Isc	0.048%/°C				
Nominal operating cell temperature (NOCT)	45±2 °C				

STC Irradiance 1000W/m<sup>2</sup>



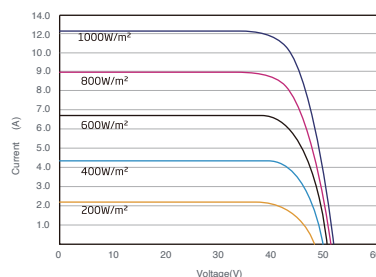
Module Temperature 25°C



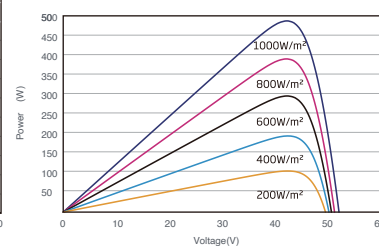
AM=1.5

## ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

I-V CURVES OF PV MODULE(480 W)



P-V CURVES OF PV MODULE(480W)



## MECHANICAL CHARACTERISTICS

Cell Type	Orion Perc Mono-crystalline (166mm×83mm)
No. of cells	144
Dimensions	2094×1038×35mm
Weight	24.0kg
Front Glass	3.2mm, High Transmission, Low Iron, AR Coating Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TÜV 1×4.0mm <sup>2</sup> / UL 12AWG, Length:400mm/1100mm