

**HC MONO**  
**580 - 595 Watt**



**KEY FEATURES**

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

Our high performing modules enable cost savings in mounting, cabling and labour of up to 15%.

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

Passed IEC 5400 Pa mechanical loading test  
PID Resistance Available.

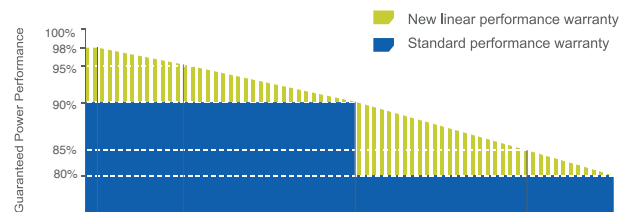
**QUALITY AND SAFETY**



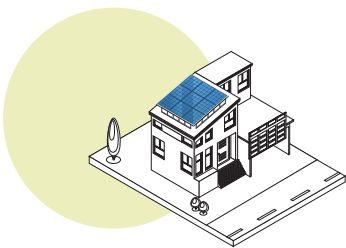
- Industry leading power output warranty  
15 years/90%,  
30 years/80%,
- 30-year warranty on materials & workmanship
- Fire Rating: Class 1



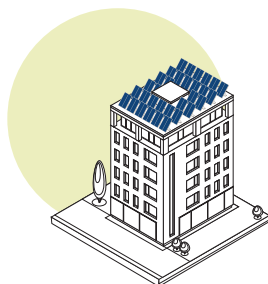
**PREMIUM PERFORMANCE WARRANTY**



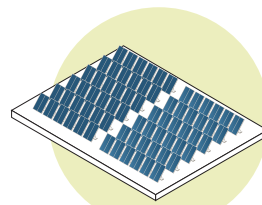
**APPLICATIONS**



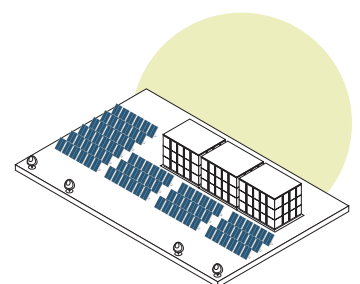
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

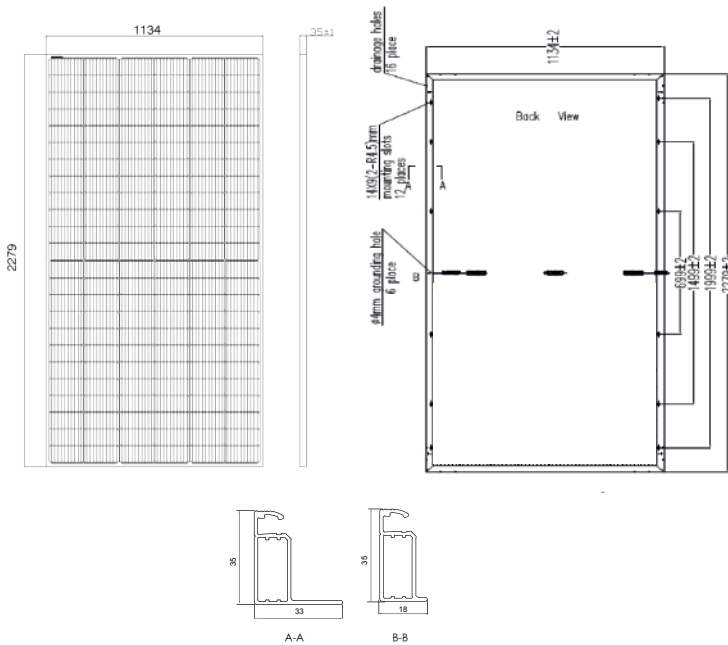


Solar power plants



Off-grid systems

## ENGINEERING DRAWINGS



## PACKAGING CONFIGURATION

Standard packaging	62 pcs / pallet
Module quantity per 20' container	N/A
Module quantity per 40' container	620pcs/40HQ

## SPECIFICATIONS

Module Type <sup>(1)</sup>	TKA580M-144		TKA585M-144		TKA590M-144		TKA595M-144	
	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>
Maximum Power (Pmax)	580Wp	436Wp	585Wp	440Wp	590Wp	444Wp	595Wp	448Wp
Maximum Power Voltage (Vmp)	42.80V	39.69V	43.00V	39.81V	43.20V	39.90V	43.40V	39.99V
Maximum Power Current (Imp)	13.56A	10.99A	13.61A	11.05A	13.66A	11.13A	13.71A	11.21A
Open-circuit Voltage (Voc)	50.93V	48.46V	51.17V	48.60V	51.41V	48.74V	51.65V	48.88V
Short-circuit Current (Isc)	14.36A	11.68A	14.42A	11.75A	14.48A	11.82A	14.53A	11.89A
Module Efficiency (%)	22.45%		22.64%		22.84%		23.02%	
Operating Temperature(°C)	-40°C~+85°C							
Maximum system voltage	1500V DC							
Maximum series fuse rating	25A							
Temperature coefficients of Pmax	-0.29%/°C							
Temperature coefficients of Voc	-0.25%/°C							
Temperature coefficients of Isc	0.048%/°C							
Nominal operating cell temperature (NOCT)	45±2 °C							

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



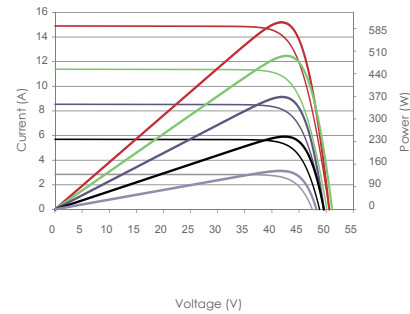
Module Temperature 25°C



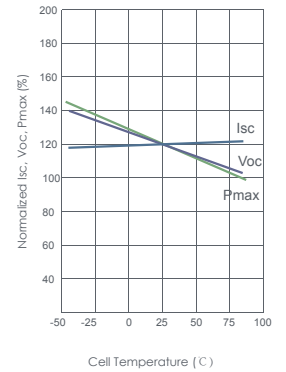
AM=1.5

## ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

Current-Voltage & Power-Voltage Curves (540W)



Temperature Dependence of Isc, Voc, Pmax



## MECHANICAL CHARACTERISTICS

Cell Type	Orion N-Type Mono-crystalline (182x91mm)
No. of cells	144 (6x24)
Dimensions	2279x1134x35mm
Weight	28.30kg
Front Glass	3.2mm, AR Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy (Silver/Black optional)
Junction Box	IP68 Rated
Output Cables	TÜV 1x4.0mm <sup>2</sup> /UL 12AWG, Length:1200mm