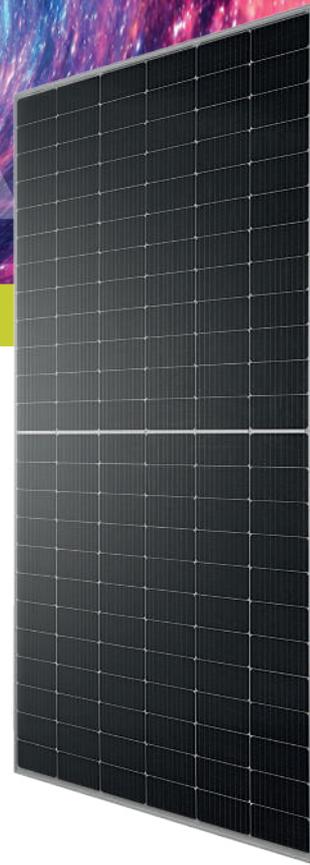


**HC MONO**  
**580 - 595 Watt**



**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

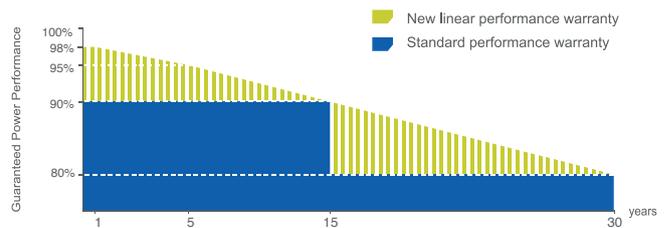
Passed IEC 5400 Pa mechanical loading test  
PID Resistance Available

**QUALITY AND SAFETY**

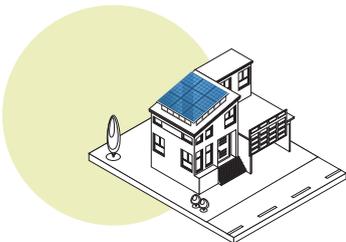
- Industry leading power output warranty  
 15 years/90%,  
 30 years/80%,
- 25-year warranty on materials & workmanship
- Fire Rating: Class 1



**PREMIUM PERFORMANCE WARRANTY**



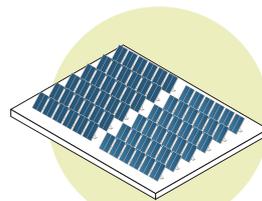
**APPLICATIONS**



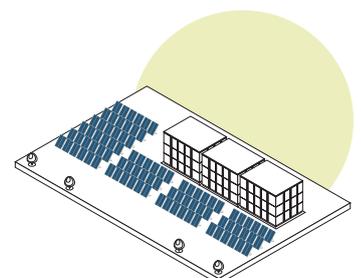
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

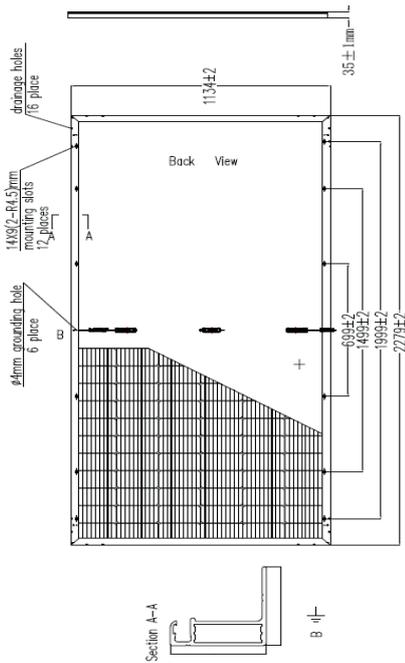


Solar power plants



Off-grid systems

## ENGINEERING DRAWINGS



## PACKAGING CONFIGURATION

Standard packaging	62 pcs / pallet
Module quantity per 20' container	155pcs/20GP
Module quantity per 40' container	620pcs/40HQ

## SPECIFICATIONS

Module Type	TKA580M-144	TKA585M-144	TKA590M-144	TKA595M-144
Maximum Power at STC(Pmax)	580Wp	585Wp	590Wp	595Wp
Maximum Power Voltage (Vmp)	42.80V	43.00V	43.20V	43.40V
Maximum Power Current (Imp)	13.56A	13.61A	13.66A	13.71A
Open-circuit Voltage (Voc)	50.93V	51.17V	51.41V	51.65V
Short-circuit Current (Isc)	14.36A	14.42A	14.48A	14.53A
Module Efficiency (%)	22.44%	22.64%	22.83%	23.02%
Operating Temperature(°C)	-40°C~+85°C			
Maximum system voltage	1500V DC			
Maximum series fuse rating	25A			
Power tolerance	0 ~ +5W			
Temperature coefficients of Pmax	-0.34%/°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>



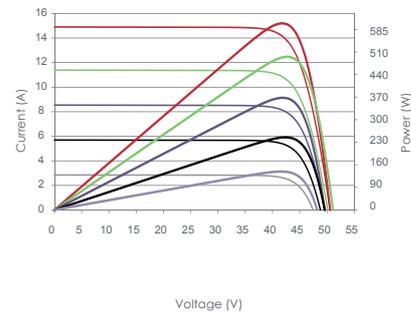
Module Temperature 25°C



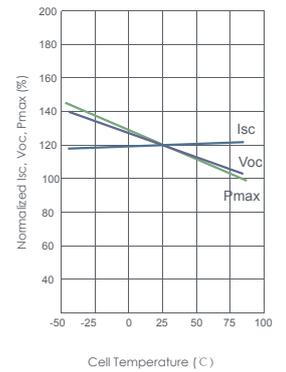
AM=1.5

## ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

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



Temperature Dependence of Isc, Voc, Pmax



## MECHANICAL CHARACTERISTICS

Cell Type	Orion Perc Mono-crystalline (182x91mm)
No. of cells	144 (2x72)
Dimensions	2279x1134x35mm
Weight	28.30kg
Front Glass	Orion Technology
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TÜV 1x4.0mm <sup>2</sup> UL 12AWG, Length:400mm/1100mm