

**HC MONO**  
**430 - 455 Watt**



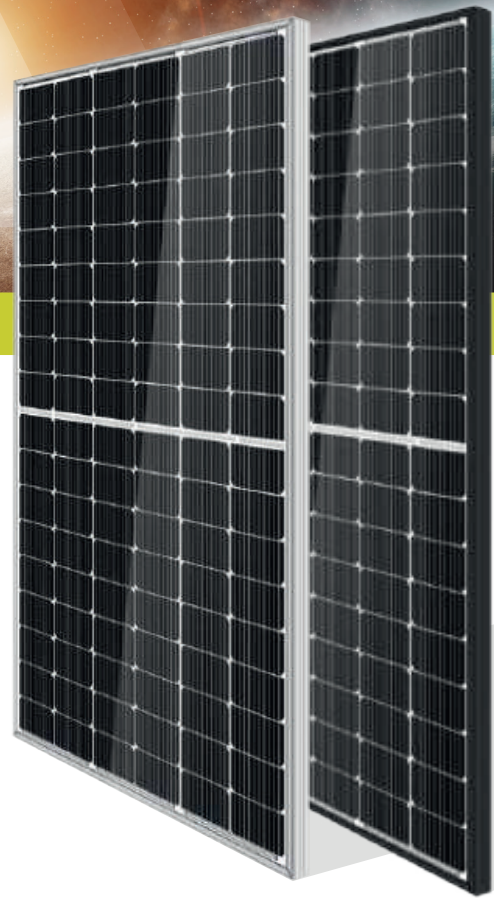
**KEY FEATURES**

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

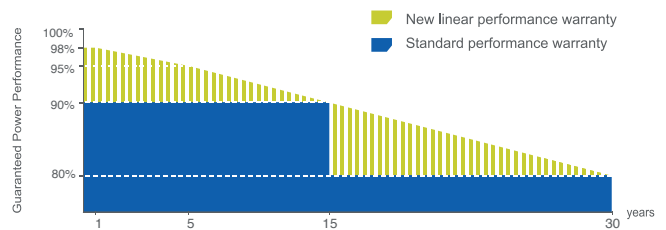


**QUALITY AND SAFETY**

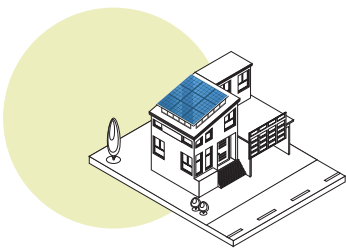
- Industry leading power output warranty  
 15 years/90%  
 30 years/80%
- 25-year warranty on materials & workmanship
- Fire Rating: Class 1



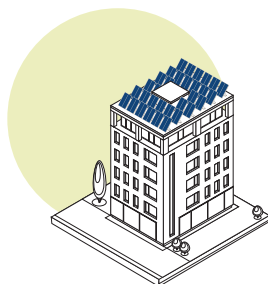
**PREMIUM PERFORMANCE WARRANTY**



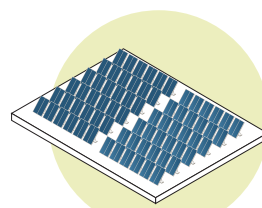
**APPLICATIONS**



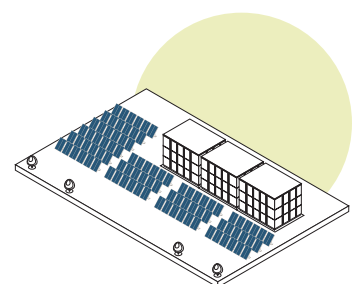
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

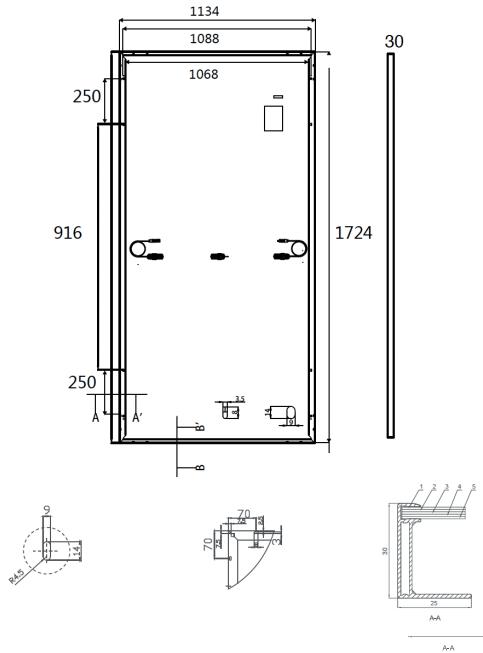


Solar power plants



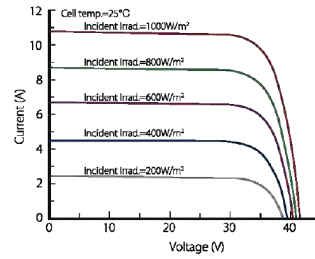
Off-grid systems

## ENGINEERING DRAWINGS

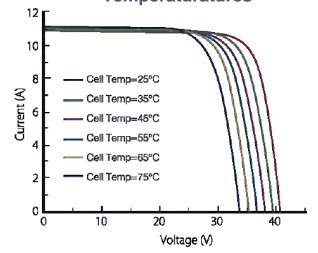


## ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

Current-Voltage & Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures



## MECHANICAL CHARACTERISTICS

Cell Type	Orion Perc Mono-crystalline 182mm
No. of cells	108
Dimensions	1724×1134×30mm
Weight	20.0kg
Front Glass	Orion Technology, 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:1100mm

## PACKAGING CONFIGURATION

Standard packaging	72 pcs / pallet
Module quantity per 20' container	402pcs
Module quantity per 40' container	936pcs

## SPECIFICATIONS

Module Type	TKA430M-108	TKA435M-108	TKA440M-108	TKA445M-108	TKA450M-108	TKA455M-108
Maximum Power at STC (P <sub>max</sub> )	430Wp	435Wp	440Wp	445Wp	450Wp	455Wp
Maximum Power Voltage (V <sub>mp</sub> )	32.72V	32.96V	33.20V	33.44V	33.66V	33.90V
Maximum Power Current (I <sub>mp</sub> )	13.15A	13.20A	13.26A	13.31A	13.37A	13.43A
Open-circuit Voltage (V <sub>oc</sub> )	38.94V	39.22V	39.51V	39.79V	40.06V	40.34V
Short-circuit Current (I <sub>sc</sub> )	13.93A	13.99A	14.05A	14.11A	14.17A	14.23A
Module Efficiency (%)	21.99%	22.25%	22.51%	22.76%	23.02%	23.27%
Operating Temperature (°C)	-40°C ~ +85°C					
Maximum system voltage	1500V DC					
Maximum series fuse rating	25A					
Power tolerance	0 ~ +5W					
Temperature coefficients of P <sub>max</sub>	-0.43%/°C					
Temperature coefficients of V <sub>oc</sub>	-0.30%/°C					
Temperature coefficients of I <sub>sc</sub>	0.04%/°C					
Nominal operating cell temperature (NOCT)	45±2 °C					

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



Module Temperature 25°C



AM=1.5