

## HC MONO 430 - 455 Watt



### KEY FEATURES

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

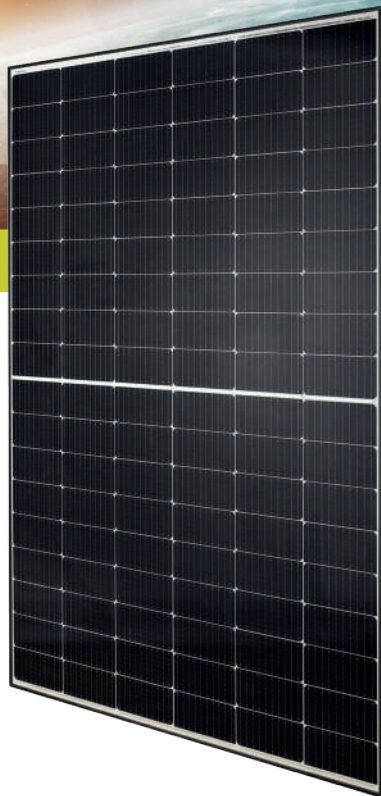
Our high performing modules enable cost savings in mounting, cabling and labour of up to 15%.

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

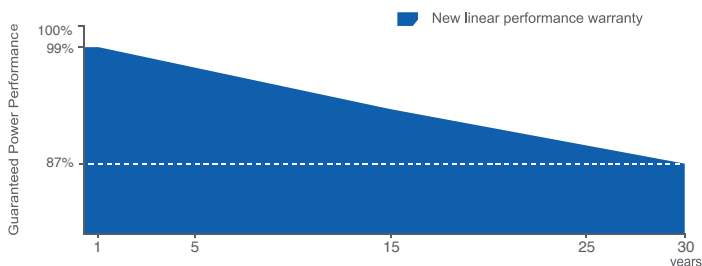
Passed IEC 5400 Pa mechanical loading test  
PID Resistance Available.

### QUALITY AND SAFETY

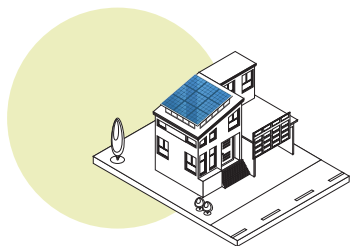
- 🕒 Industry leading power output warranty  
30 years/87,4%
- 🕒 30-year warranty on materials & workmanship
- 🔥 Fire Rating: Class 1



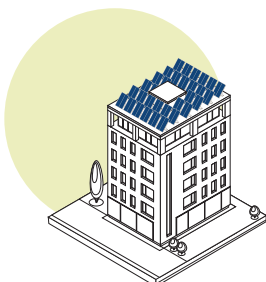
### PREMIUM PERFORMANCE WARRANTY



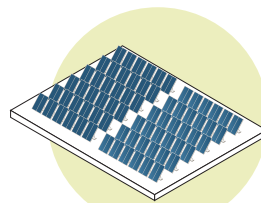
### APPLICATIONS



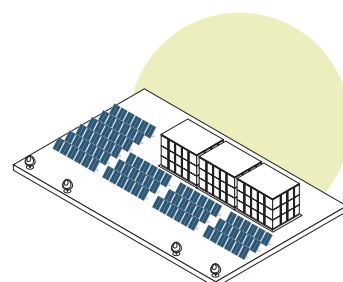
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

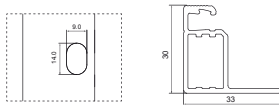
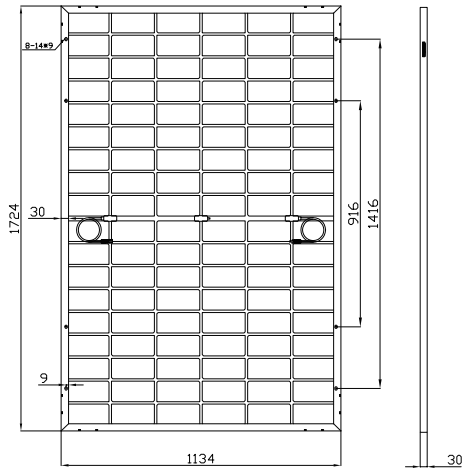


Solar power plants



Off-grid systems

## ENGINEERING DRAWINGS



## PACKAGING CONFIGURATION

Standard packaging	36 pcs / pallet
Module quantity per 40' container	936 pcs
Pallet per container	26

## SPECIFICATIONS

STC



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



Module Temperature 25°C

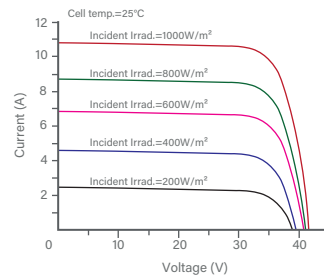


AM=1.5

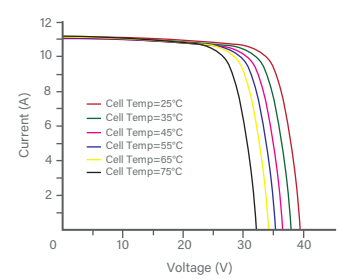
Module Type <sup>(1)</sup>	TKA430M-108		TKA435M-108		TKA440M-108		TKA445M-108		TKA450M-108		TKA455M-108	
	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>	STC <sup>(2)</sup>	NMOT <sup>(3)</sup>
Maximum Power (P <sub>max</sub> )	430Wp	323Wp	435Wp	327Wp	440Wp	331Wp	445Wp	335Wp	450Wp	339Wp	455Wp	343Wp
Maximum Power Voltage (V <sub>mp</sub> )	32.72V	30.10V	32.96V	30.34V	33.20V	30.57V	33.44V	30.79V	33.66V	31.02V	33.90V	32.24V
Maximum Power Current (I <sub>mp</sub> )	13.15A	10.73A	13.21A	10.78A	13.27A	10.83A	13.33A	10.88A	13.39A	10.93A	13.45A	10.98A
Open-circuit Voltage (V <sub>oc</sub> )	38.62V	37.00V	38.86V	37.20V	39.00V	37.40V	39.14V	37.60V	39.28V	37.80V	39.42V	38.00V
Short-circuit Current (I <sub>sc</sub> )	13.90A	11.09A	13.96A	11.14A	14.02A	11.19A	14.08A	11.24A	14.14A	11.29A	14.20A	11.34A
Module Efficiency (%)	21.99%		22.27%		22.53%		22.78%		23.04%		23.29%	
V <sub>oc</sub> and I <sub>sc</sub> tolerance	±3%											
Operating Temperature(°C)	-40°C~+85°C											
Maximum system voltage	1500V											
Maximum series fuse rating	25A											
Temperature coefficients of P <sub>max</sub>	-0.29%/°C											
Temperature coefficients of V <sub>oc</sub>	-0.25%/°C											
Temperature coefficients of I <sub>sc</sub>	0.045%/°C											
Nominal operating cell temperature (NOCT)	45±2 °C											

## ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

Current-Voltage & Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures



## MECHANICAL CHARACTERISTICS

Cell Type	Orion N-Type TOPCon Mono-crystalline (182X91mm)
No. of cells	108(6x18)
Dimensions	1724×1134×30mm (±2mm)
Weight	20.5 kg
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 1×4.0mm <sup>2</sup> / UL 12AWG, Length:1100mm