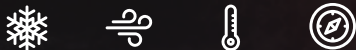


HC MONO TB
430 - 450 Watt



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.

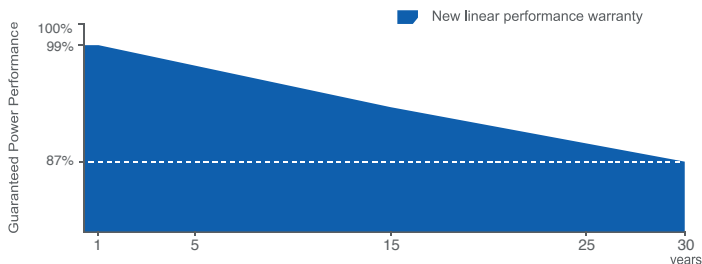
Passed IEC 5400 Pa mechanical loading test
PID Resistance Available.

QUALITY AND SAFETY

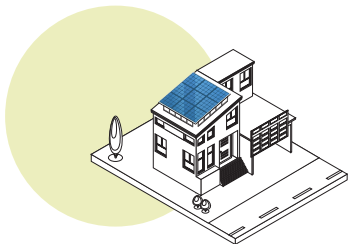


- 🕒 Industry leading power output warranty
30 years/87,4%
- 🕒 30-year warranty on materials & workmanship
- 🔥 Fire Rating: Class 1

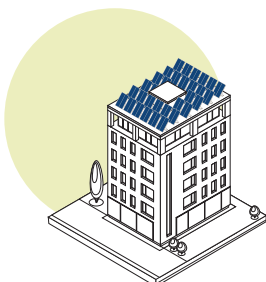
PREMIUM PERFORMANCE WARRANTY



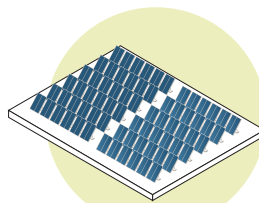
APPLICATIONS



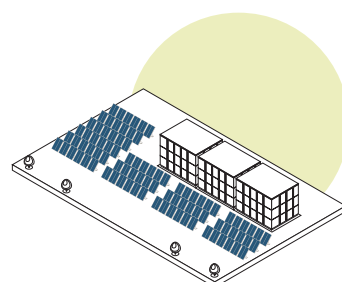
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

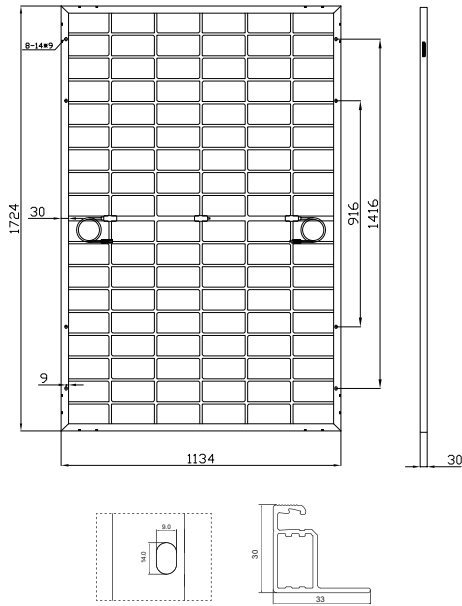


Solar power plants



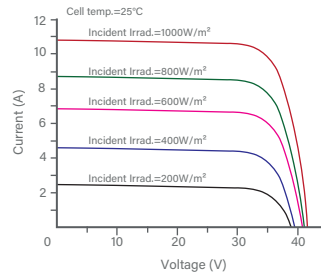
Off-grid systems

ENGINEERING DRAWINGS

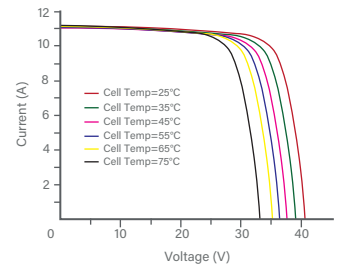


ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

Current-Voltage & Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures



PACKAGING CONFIGURATION

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

MECHANICAL CHARACTERISTICS

Cell Type	Orion N-Type Mono-crystalline (182x91mm)
No. of cells	108 (6x18)
Dimensions	1724x1134x30mm (±2mm)
Weight	20.5 kg
Front Glass	3.2mm, Anti-Reflecting Coating
Junction Box	Anodized Aluminium Alloy / IP68 Rated
Output Cables	TÜV 1x4.0mm²/UL 12AWG, Length:1100mm

SPECIFICATIONS

STC Irradiance 1000W/m² Module Temperature 25°C AM=1.5

Module Type ⁽¹⁾	TKA430M-108B		TKA435M-108B		TKA440M-108B		TKA445M-108B		TKA450M-108B	
	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾
Maximum Power (P _{max})	430Wp	321Wp	435Wp	325Wp	440Wp	329Wp	445Wp	333Wp	450Wp	337Wp
Maximum Power Voltage (V _{mp})	33.16V	30.26V	33.36V	30.44V	33.56V	30.62V	33.76V	33.81V	33.96V	30.95V
Maximum Power Current (I _{mp})	12.97A	10.61A	13.05A	10.68A	13.12A	10.75A	13.19A	10.82A	13.25A	10.89A
Open-circuit Voltage (V _{oc})	39.43V	37.02V	39.63V	37.21V	39.83V	37.40V	40.03V	37.58V	40.23V	37.76V
Short-circuit Current (I _{sc})	14.01A	11.31A	14.08A	11.37A	14.15A	11.43A	14.23A	11.49A	14.31A	11.55A
Module Efficiency (%)	22.02%		22.28%		22.53%		22.79%		23.04%	
V _{oc} and I _{sc} tolerance	±3%									
Operating Temperature (°C)	-40°C ~ +85°C									
Maximum system voltage	1500V									
Maximum series fuse rating	25A									
Power tolerance	0 ~ +5W									
Temperature coefficients of P _{max}	-0.29%/°C									
Temperature coefficients of V _{oc}	-0.25%/°C									
Temperature coefficients of I _{sc}	0.045%/°C									
Nominal operating cell temperature (NOCT)	45±2 °C									