

HC MONO
480 - 500 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.

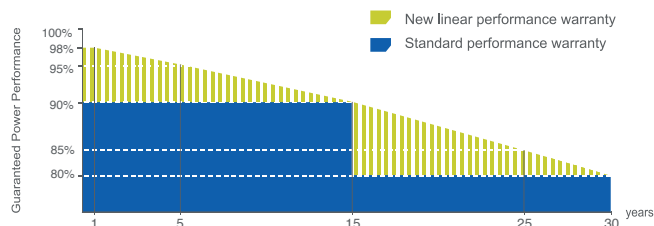


QUALITY AND SAFETY

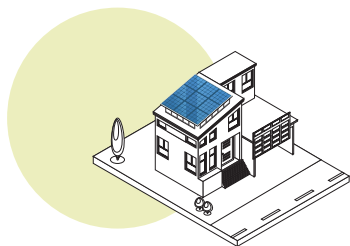
- ⌚ Industry leading power output warranty
15 years/90%
30 years/80%
- ⌚ 25-year warranty on materials & workmanship
- 🔥 Fire Rating: Class 1



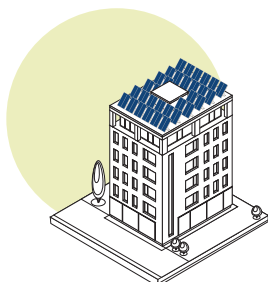
PREMIUM PERFORMANCE WARRANTY



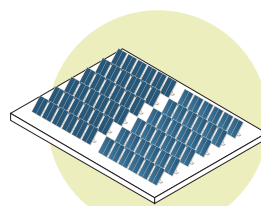
APPLICATIONS



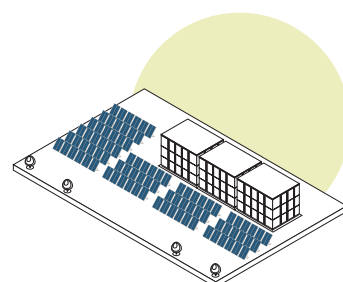
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

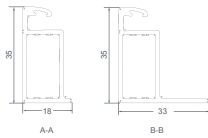
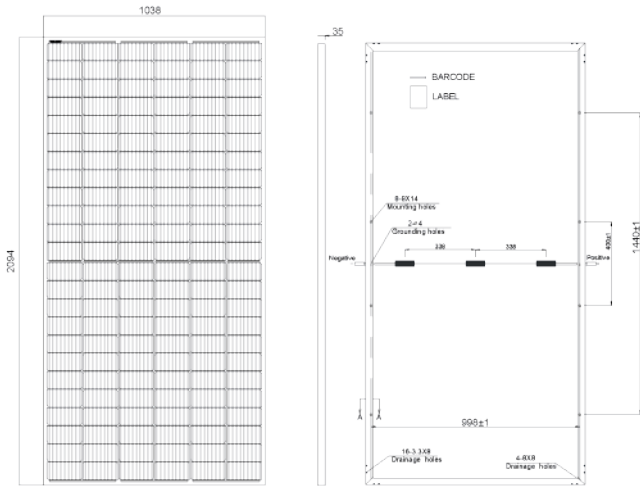


Solar power plants



Off-grid systems

ENGINEERING DRAWINGS




PACKAGING CONFIGURATION

Standard packaging	66 pcs / pallet
Module quantity per 20' container	N/A
Module quantity per 40' container	726pcs

SPECIFICATIONS

Module Type ⁽¹⁾	TKA480M-144		TKA485M-144		TKA490M-144		TKA495M-144		TKA500M-144	
	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾
Maximum Power (P _{max})	480Wp	348Wp	485Wp	351Wp	490Wp	354Wp	495Wp	357Wp	500Wp	360Wp
Maximum Power Voltage (V _{mp})	42.90V	38.48V	43.10V	38.58V	43.30V	38.68V	43.50V	38.78V	43.70V	38.88V
Maximum Power Current (I _{mp})	11.18A	9.05A	11.25A	9.10A	11.32A	9.16A	11.39A	9.21A	11.46A	9.26A
Open-circuit Voltage (V _{oc})	50.30V	45.74V	50.50V	45.77V	50.70V	45.80V	50.90V	45.83V	51.10V	45.86V
Short-circuit Current (I _{sc})	11.64A	9.65A	11.70A	9.71A	11.76A	9.77A	11.82A	9.83A	11.88A	9.89A
Module Efficiency (%)	21.08%		22.31%		22.54%		22.77%		23%	
V _{oc} and I _{sc} tolerance	±3%									
Operating Temperature (°C)	-40°C~+85°C									
Maximum system voltage	1500V									
Maximum series fuse rating	20A									
Temperature coefficients of P _{max}	-0.29%/°C									
Temperature coefficients of V _{oc}	-0.25%/°C									
Temperature coefficients of I _{sc}	0.048%/°C									
Nominal operating cell temperature (NOCT)	45±2 °C									

STC  Irradiance 1000W/m²



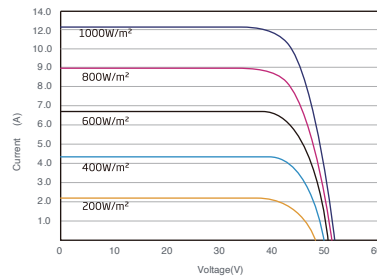
Module Temperature 25°C



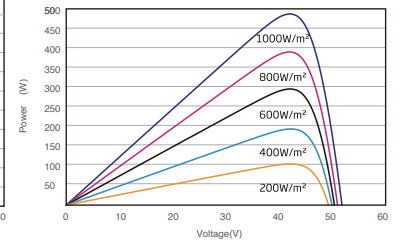
AM=1.5

ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

I-V CURVES OF PV MODULE(480 W)



P-V CURVES OF PV MODULE(480W)



MECHANICAL CHARACTERISTICS

Cell Type	Orion N-Type Mono-crystalline (166mm×83mm)
No. of cells	144 (6X24)
Dimensions	2094×1038×35mm
Weight	24.0kg
Front Glass	3.2mm, High Transmission, Low Iron, AR Coating Glass, Tempered Glass
Frame	Anodized Aluminium Alloy (Silver/Black optional)
Junction Box	IP68 Rated
Output Cables	TÜV 1×4.0mm ² / UL 12AWG, Length:1100mm