

BIFACIAL
580 - 600 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.

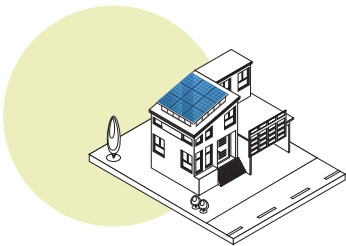
Passed IEC 5400 Pa mechanical loading test
PID Resistance Available.

QUALITY AND SAFETY

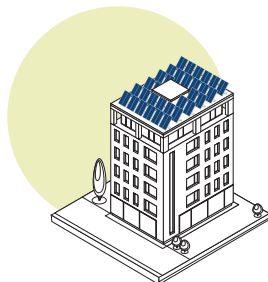
-  Industry leading power output warranty
 15 years/90%
 30 years/80%
-  25-year warranty on materials & workmanship
-  Fire Rating: Class 1



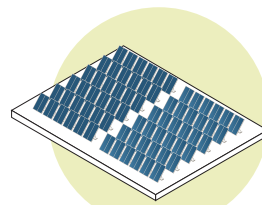
APPLICATIONS



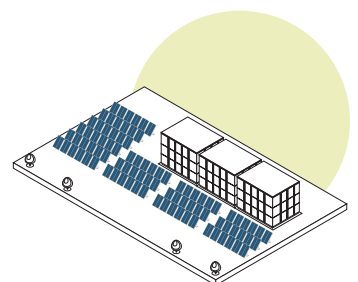
On-grid residential roof-tops



On-grid commercial - industrial roof-tops



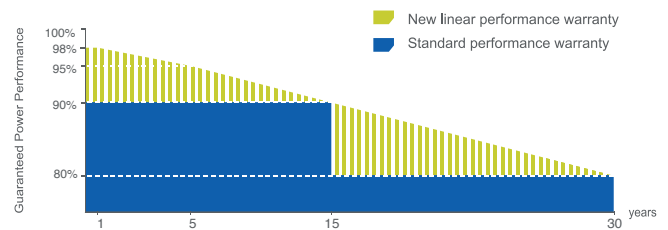
Solar power plants



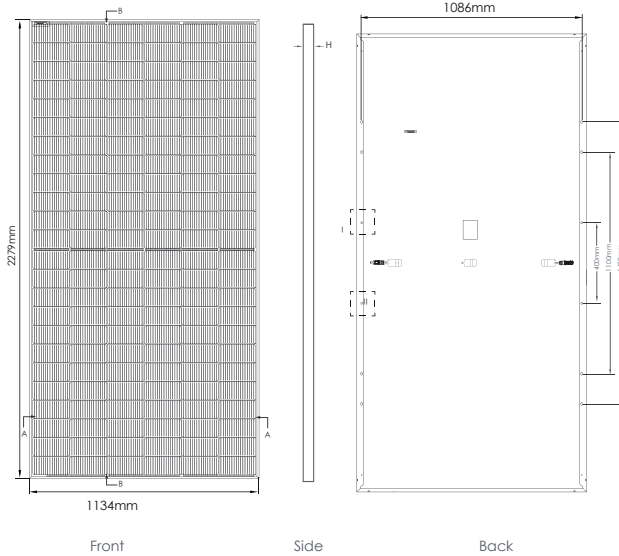
Off-grid systems



PREMIUM PERFORMANCE WARRANTY

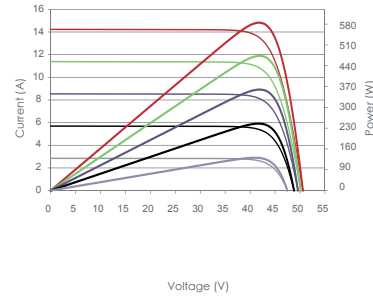


ENGINEERING DRAWINGS

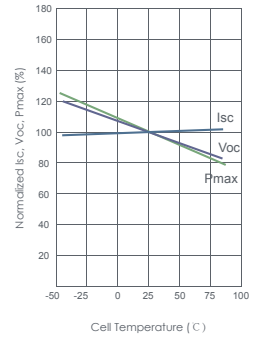


ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

Current-Voltage & Power-Voltage Curves(580W)



Temperature Dependence of Isc, Voc, Pmax



PACKAGING CONFIGURATION

Standard packaging	31pcs/pallet
Module quantity per 20' container	155pcs/20GP
Module quantity per 40' container	620pcs/40HQ

MECHANICAL CHARACTERISTICS

Cell Type	Orion Mono-crystalline(182x182mm)
No. of cells	144 (2x72)
Dimensions	2279x1134x35mm
Weight	28.30kg
Front Glass	Bifacial Technology
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TÜV 1x4.0mm ² / UL 12AWG, Length:400mm/1100mm or Customized Length

SPECIFICATIONS

Module Type	TKA580M-144-BF	TKA585M-144-BF	TKA590M-144-BF	TKA595M-144-BF	TKA600M-144-BF
Maximum Power at STC(Pmax)	580Wp	585Wp	590Wp	595Wp	600Wp
Maximum Power Voltage (Vmp)	42.80V	43.00V	43.20V	43.40V	43.60V
Maximum Power Current (Imp)	13.56A	13.61A	13.66A	13.71A	13.77A
Open-circuit Voltage (Voc)	50.93V	51.17V	51.41V	51.65V	51.88V
Short-circuit Current (Isc)	14.36A	14.42A	14.48A	14.53A	14.59A
Module Efficiency (%)	22.44%	22.64%	22.83%	23.02%	23.22%
Operating Temperature (°C)	-40°C~+85°C				
Maximum system voltage	1500V DC				
Maximum series fuse rating	30A				
Power tolerance	0 ~ +5W				
Temperature coefficients of Pmax	-0.35%/°C				
Temperature coefficients of Voc	-0.28%/°C				
Temperature coefficients of Isc	0.048%/°C				
Nominal operating cell temperature (NOCT)	45±2 °C				
Refer. Bifacial Factor	70±5%				

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

Gain (%)	TKA580M-144-BF	TKA585M-144-BF	TKA590M-144-BF	TKA595M-144-BF	TKA600M-144-BF
5%	609Wp	614Wp	619Wp	624Wp	630Wp
15%	667Wp	672Wp	678Wp	684Wp	690Wp
25%	725Wp	731Wp	737Wp	743Wp	750Wp

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