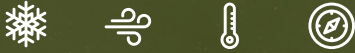


BIFACIAL
580 - 600 Watt



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.

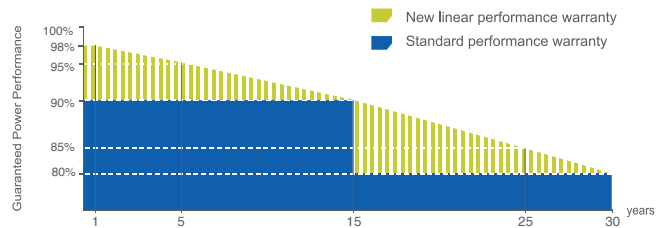
Passed IEC 5400 Pa mechanical loading test
PID Resistance Available.

QUALITY AND SAFETY

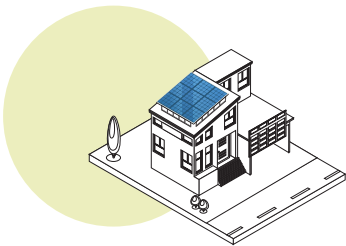
- ⌚ Industry leading power output warranty
15 years/90%
30 years/80%
- ⌚ 25-year warranty on materials & workmanship
- 🔥 Fire Rating: Class 1



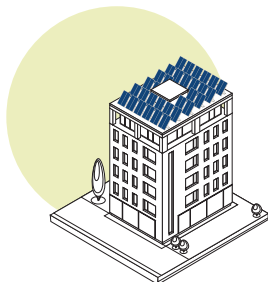
PREMIUM PERFORMANCE WARRANTY



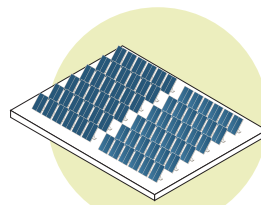
APPLICATIONS



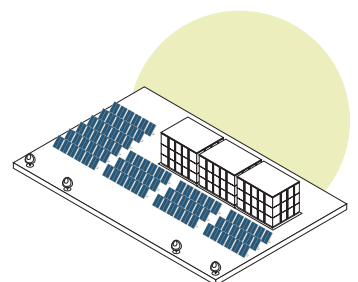
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

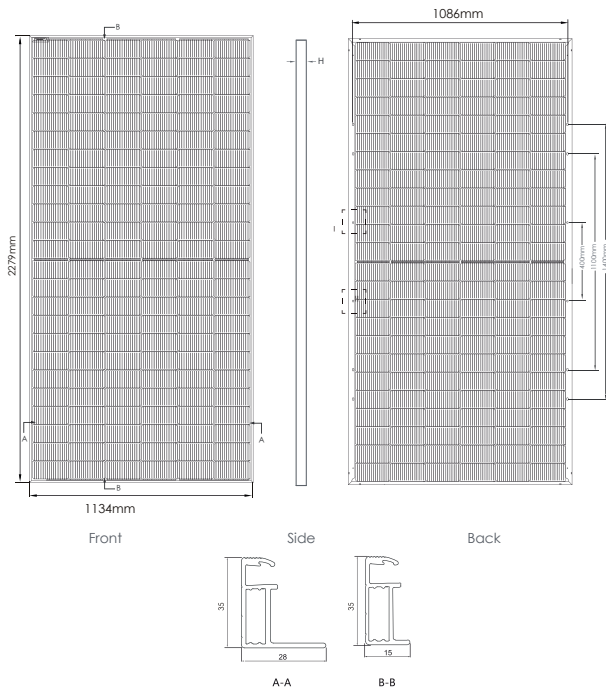


Solar power plants



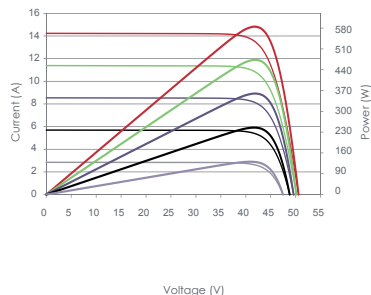
Off-grid systems

ENGINEERING DRAWINGS

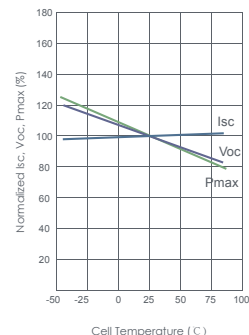


ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

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



Temperature Dependence of Isc, Voc, Pmax



MECHANICAL CHARACTERISTICS

Cell Type	Orion N-Type Mono-crystalline(182x91mm)
No. of cells	144 (6x24)
Dimensions	2279x1134x35mm
Weight	27.5kg
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy (Silver/Black optional)
Junction Box	IP68 Rated
Backsheet	Transparent
Output Cables	TÜV 1x4.0mm ² / UL 12AWG, Length:1200mm

PACKAGING CONFIGURATION

Standard packaging	36pcs/pallet
Module quantity per 20' container	N/A
Module quantity per 40' container	620pcs/40HQ

SPECIFICATIONS

Module Type ⁽¹⁾	TKA580M-144-BF		TKA585M-144-BF		TKA590M-144-BF		TKA595M-144-BF		TKA600M-144-BF	
	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾	STC ⁽²⁾	NMOT ⁽³⁾
Maximum Power (Pmax)	580Wp	436Wp	585Wp	440Wp	590Wp	444Wp	595Wp	448Wp	600Wp	452Wp
Maximum Power Voltage (Vmp)	42.80V	39.86V	43.00V	40V	43.20V	40.15V	43.40V	40.29V	43.60V	40.43V
Maximum Power Current (Imp)	13.56A	10.94A	13.61A	11.00A	13.66A	11.06A	13.71A	11.12A	13.77A	11.18A
Open-circuit Voltage (Voc)	50.93V	48.89V	51.17V	49.08V	51.41V	49.27V	51.65V	49.46V	51.88V	49.65V
Short-circuit Current (Isc)	14.36A	11.6A	14.42A	11.65A	14.48A	11.7A	14.53A	11.75A	14.59A	11.8A
Module Efficiency (%)	22.44%		22.64%		22.83%		23.02%		23.22%	
Voc and Isc tolerance	±3%									
Operating Temperature (°C)	-40°C~+85°C									
Maximum system voltage	1500V									
Maximum series fuse rating	25A									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.045%/°C									
Nominal operating cell temperature (NOCT)	45±2 °C									
Refer. Bifacial Factor	70±5%									

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

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

5%	609Wp	614Wp	619Wp	624Wp	630Wp
15%	667Wp	672Wp	678Wp	684Wp	690Wp
25%	725Wp	731Wp	737Wp	743Wp	750Wp