

HC MONO

ORION nano-tech layer

580 - 605 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.

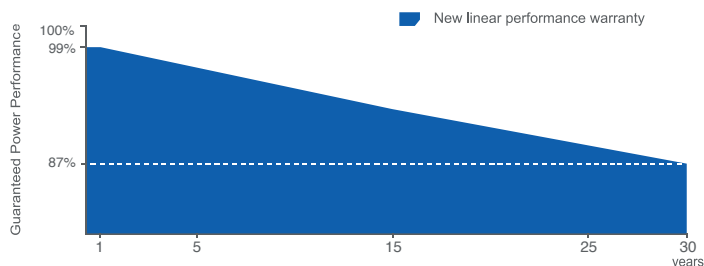
Passed IEC 5400 Pa mechanical loading test.
PID Resistance Available.

QUALITY AND SAFETY

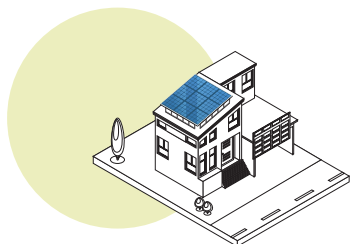
- ✓ Industry leading power output warranty
30 years/87,4%
- ✓ 30-year warranty on materials & workmanship
- 🔥 Fire Rating: Class 1



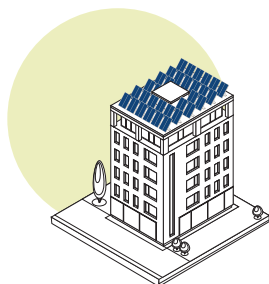
PREMIUM PERFORMANCE WARRANTY



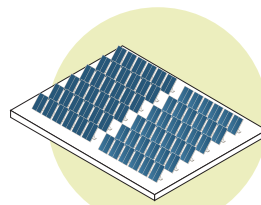
APPLICATIONS



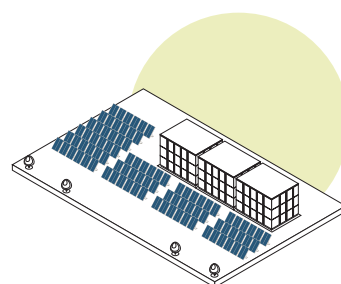
On-grid residential roof-tops



On-grid commercial - industrial roof-tops

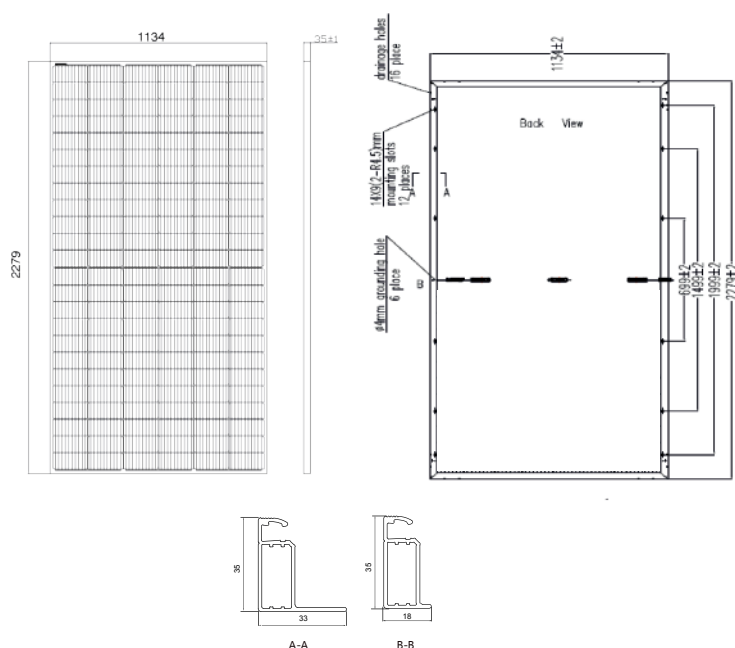


Solar power plants



Off-grid systems

ENGINEERING DRAWINGS



PACKAGING CONFIGURATION

Standard packaging	31 pcs / pallet
Module quantity per 40' container	620 pcs
Pallets per container	20

SPECIFICATIONS

Module Type ⁽¹⁾	ORION VII-580M		ORION VII-585M		ORION VII-590M		ORION VII-595M		ORION VII-600M		ORION VII-605M	
	STC ⁽²⁾	NMOT ⁽³⁾	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	605Wp	456Wp
Maximum Power Voltage (Vmp)	42.8V	39.69V	43V	39.81V	43.20V	39.90V	43.40V	39.99V	43.60V	40.08V	43.80V	40.17V
Maximum Power Current (Imp)	13.56A	10.99A	13.61A	11.05A	13.66A	11.13A	13.71A	11.21A	13.77A	11.28A	13.82A	11.36A
Open-circuit Voltage (Voc)	50.93V	48.46V	51.17V	48.6V	51.41V	48.74V	51.65V	48.88V	51.89V	49.02V	52.13V	49.16V
Short-circuit Current (Isc)	14.36A	11.68A	14.42A	11.75A	14.48A	11.82A	14.53A	11.89A	14.59A	11.96A	14.65A	12.03A
Module Efficiency (%)	22.49%		22.64%		22.84%		23.02%		23.22%		23.41%	
Operating Temperature(°C)	-40°C~+85°C											
Maximum system voltage	1500V DC											
Maximum series fuse rating	25A											
Temperature coefficients of Pmax	-0.29%/°C											
Temperature coefficients of Voc	-0.25%/°C											
Temperature coefficients of Isc	0.048%/°C											
Nominal operating cell temperature (NOCT)	45±2 °C											



Irradiance 1000W/m²

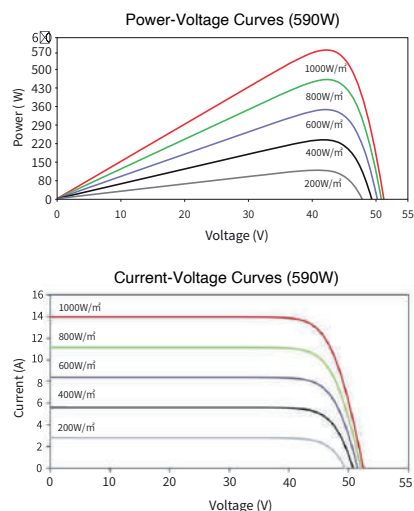


Module Temperature 25°C



AM=1.5

ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE



MECHANICAL CHARACTERISTICS

Cell Type	Orion N-Type TOPCon Mono-crystalline Orion Technology Layer Applied*
No. of cells	144 (6×24)
Dimensions	2279×1134×35mm (±2mm)
Weight	28.30kg
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 ² /UL 12AWG, Length:1200mm or customized length