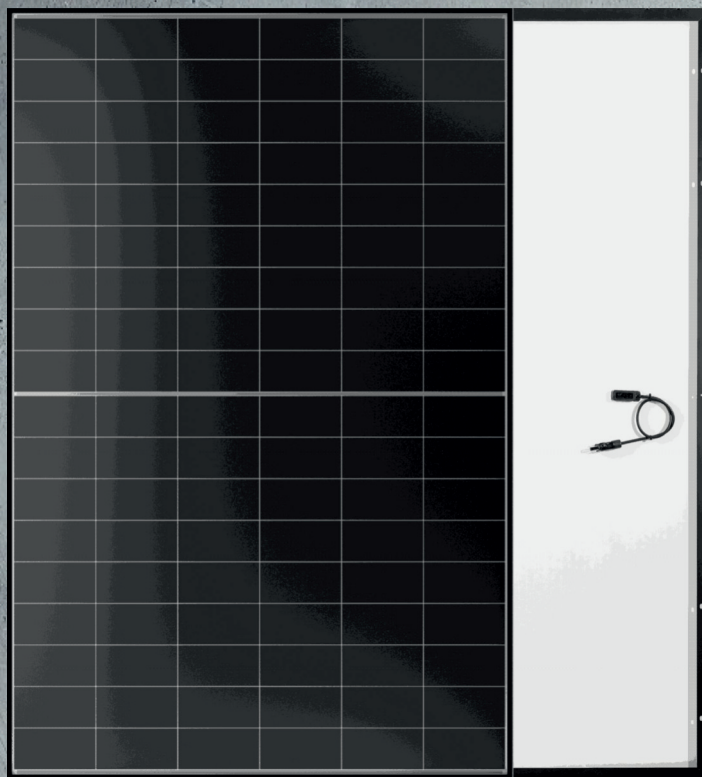


Tenka Orion III Plus **Black Frame**



Tenka Orion III Plus - Product features



Module efficiency

23.27% module efficiency and 465W
Peak power under 2 square metres



Hail protection class 4

Hail protection class 4 for protection
against hailstones up to 45 mm



Nanotech coating

Patented Tenka Nanotech technology
for improved light absorption



Longevity

Low degradation, optimised long-term
performance



Product guarantee

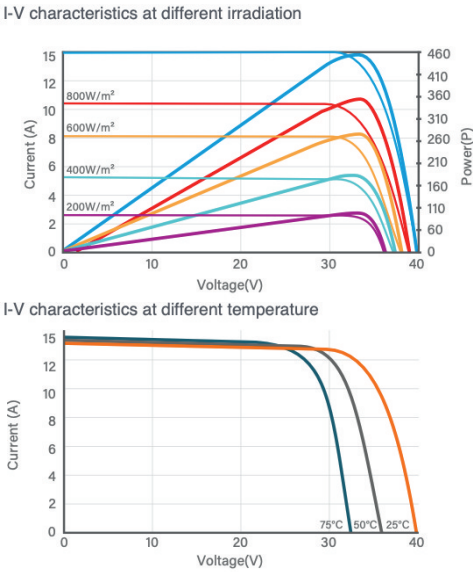
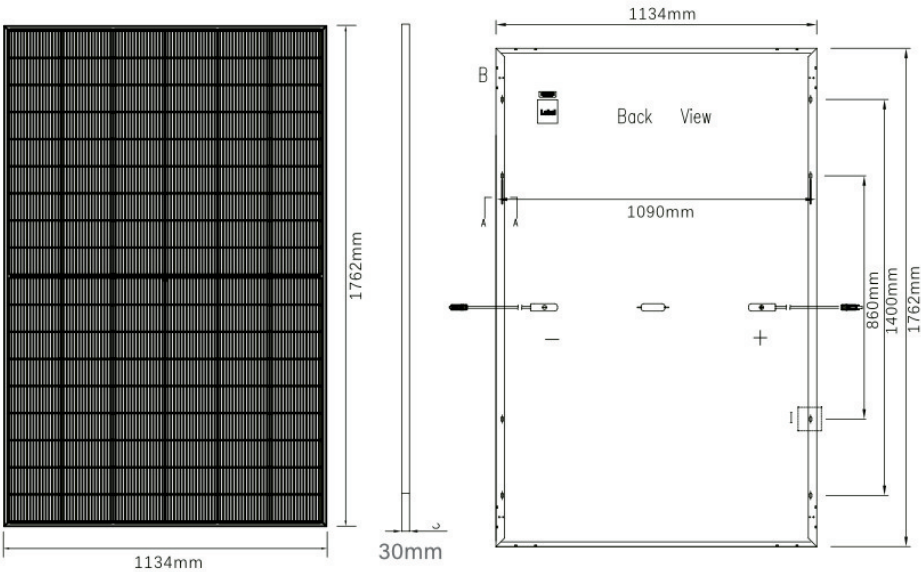
30-year product guarantee for
maximum investment security



Performance guarantee

30-year performance guarantee on
87.4 % performance guaranteed

Technical Datasheet	450 W		455 W		460 W		465 W	
	STC ¹	NMOT ²	STC ¹	NMOT ²	STC ¹	NMOT ²	STC ¹	NMOT ²
Maximum power (Pmax)	450Wp	341Wp	455Wp	345Wp	460Wp	349Wp	465Wp	352Wp
Maximum power Voltage (Vmp)	33,22V	30,56V	33,42V	30,75V	33,63V	30,94V	33,83V	31,12V
Maximum power Current (Imp)	13,55A	11,16A	13,61A	11,21A	13,68A	11,27A	13,75A	11,32A
Open circuit voltage (Voc)	39,78V	36,20V	39,98V	36,38V	40,18V	36,56V	40,38V	36,75V
Short-circuit current (Isc)	14,00A	11,29A	14,06A	11,34A	14,13A	11,40A	14,20A	11,45A
Module efficiency (%)	22,52%		22,77%		23,02%		23,27%	
Voc and Isc Tolerances	±3%							
Operating temperature (°C)	-40°C~+85°C							
Maximum system voltage	1500V							
Maximum series protection	25A							
Temperature coefficient Pmax	-0,29%/°C							
Temperature coefficient Voc	-0,25%/°C							
Temperature coefficient Isc	-0,045%/°C							
Nominal operating temperature of the cell (NOCT)	45±2 °C							
Cell type	N-Type, TOPCon, mono-cristalline 183 mm, Tenka Nanotech Coating							
Number of cells	108							
Dimensions	1762 x 1134 x 30 mm (±2mm)							
Weight	21,5 Kg							
Glass front	3,2 mm tempered glass, highly transparent anti-reflective coating							
Backside	White film							
Frame	Anodized aluminium alloy							
Junction box	Protection class IP68							
Output cable	TÜV 1x4,0 mm² / UL 12AWG, Length 1100mm							
Resistance to mechanical loads	5.400 Pa acc. IEC 61215-1-2							
Certificates	IEC61215, IEC61730							



Packaging information: 36 pieces per pallet, 936 pieces per container (26 pallets)

¹ STC (standard test conditions): Irradiance 1000W/m2. Cell temperature 25°C. AM 1.5
² NMOT (Nominal Module Operating Temperature): Irradiance 800W/m2. NMOT ambient temperature 20°C. AM 1.5.
Wind speed 1m/s. Data at nominal conditions.
All data subject to change without notice | Version: Feb 2025

