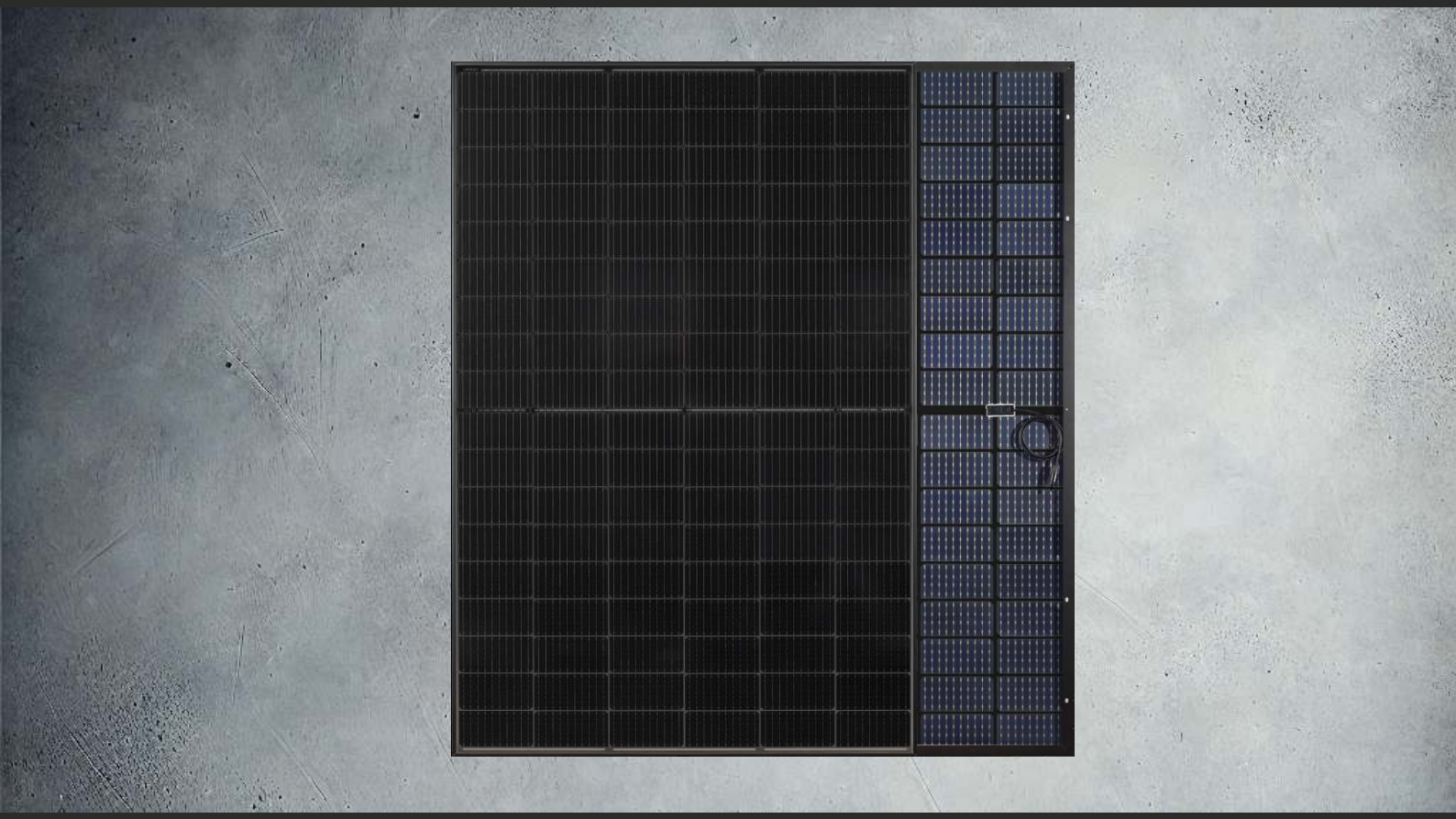
Tenka Orion III Ultra Bifacial Black Mesh



Tenka Orion III Ultra Bi-facial - Product features

Module efficiency
23.76% module efficiency and 485W Peak power

Bifacial design
Additional yield through rear power increase

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

General distribution DACH, BENELUX & Baltics:
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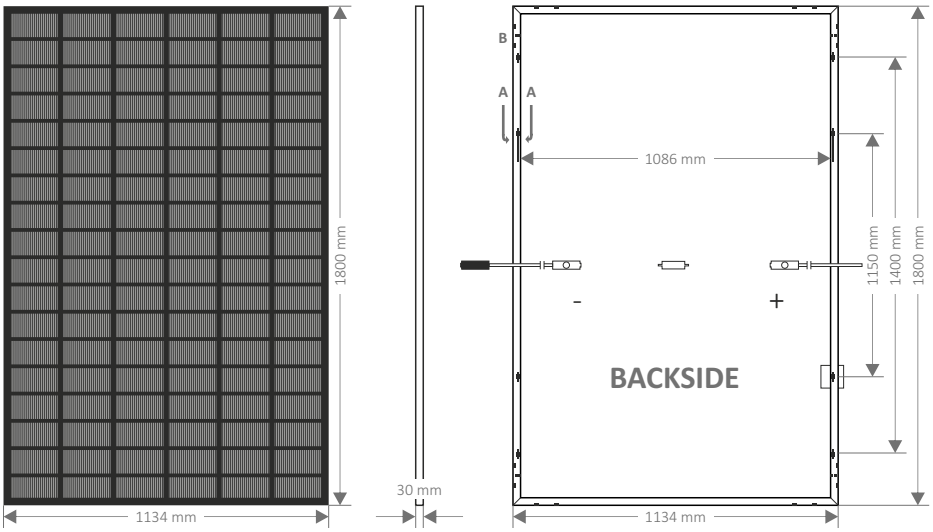
Tenka Orion III Ultra Bi-facial

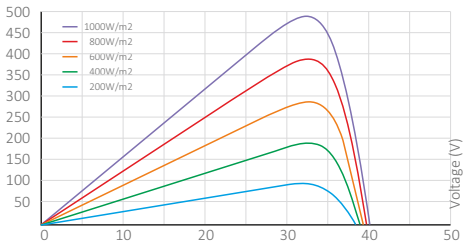
Technical Datasheet	470 W		475 W		480 W		485 W	
	STC [1]	NMOT [2]	STC [1]	NMOT [2]	STC [1]	NMOT [2]	STC [1]	NMOT [2]
Maximum power (Pmax)	470 Wp	356 Wp	475 Wp	360 Wp	480 Wp	364 Wp	485 Wp	368 Wp
Maximum power Voltage (Vmp)	33,62 V	30,93 V	33,82 V	31,11 V	34,02 V	31,29 V	34,22 V	31,47 V
Maximum power Current (Imp)	13,98 A	11,52 A	14,04 A	11,57 A	14,11 A	11,64 A	14,18 A	11,70 A
Open circuit voltage (Voc)	40,18 V	36,56 V	40,38 V	36,75 V	40,58 V	36,93 V	40,78 V	37,11 V
Short-circuit current (Isc)	14,71 A	11,87 A	14,89 A	11,97 A	14,98 A	12,13 A	15,08 A	12,29 A
Module efficiency (%)	23,02%		23,27%		23,52%		23,76%	
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	1800 x 1134 x 30 mm (±2mm)							
Weight	24,5 Kg							
Glass front	1,6 mm glass, anti-reflective coating							
Glass back	1,6 mm tempered glass							
Frame	Anodized aluminium alloy, Black							
Junction box	Protection class IP68							
Output cable	TÜV 1 x 4.0 mm2 / UL 12AWG, length 1100 mm with original Stäubli MC4 connectors							
Resistance to mechanical loads	5.400 Pa acc. IEC 61215-1-2							
Certificates	IEC61215, IEC61730							

Bi-facial backside power increase	470 W	475 W	480 W	485 W
5%	494 Wp	499 Wp	504 Wp	509 Wp
15%	540 Wp	546 Wp	552 Wp	557 Wp
25%	587 Wp	593 Wp	600 Wp	606 Wp

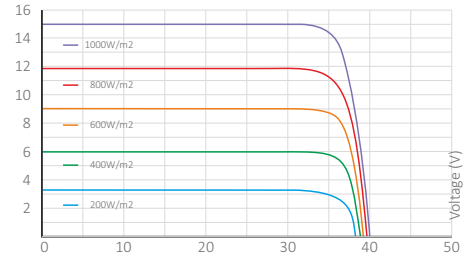
Measurements



P-V Characteristic curve of PV Module



I-V Characteristic curve of PV Module



Packaging information: 36 pieces per pallet, 864 pieces per container (24 pallets)

* By using the Tenka Nanotech layer, 15/20 watts more are generated compared to the standard cell.
[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. Errors and omissions excepted. Illustrations may vary.

TENKA solar