

NORDIKA SERIES 450W / 470W

NT7 N-Type Rectangle TOPCon
Bifacial Ultra Black



Bifacial technology enables additional energy harvesting from rear side (up to 30%)



30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module



N-type solar cell has no LID naturally which can increase power generation



Stronger surface resistance to mechanical loads with 8000PA front side and 5400PA back side



Better light trapping and current collection to improve module power output and reliability



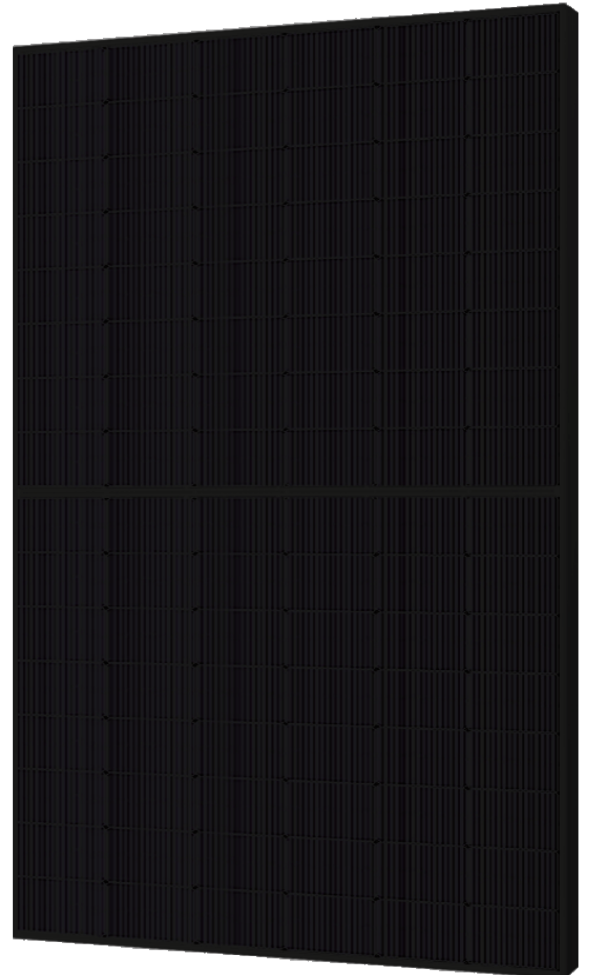
Industry leading lowest thermal co-efficient of power



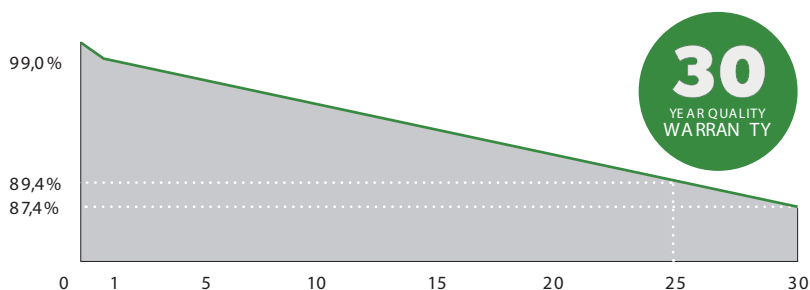
Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient



Passed kiwa hail test with a diameter of 45mm a speed of 30.7m per second



LINEAR PERFORMANCE WARRANTY



ABOUT OMNISPOWER

Omnispower was founded in 2010 by a group of entrepreneurs with experience in the energy sector and a common idea: to innovate the renewable energy sector. Arising from several spin-offs of leading companies in the industry, Omnis Power is at the forefront of new technology research and competitive product development.

Today, Omnis Power is a European company with international experience that believes and invests in Norway in addition to numerous partners around the world.

The increasingly strong group already has offices in Italy, Lithuania, Estonia, Germany and Norway in addition to numerous partners around the world.

Model of modules	OP4 50M48-NT7-BF		OP4 55M48-NT7-BF		OP4 60M48-NT7-BF		OP4 65M48-NT7-BF		OP4 70M48-NT7-BF	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power — P_{mp} (W)	450	341	455	346	460	350	465	354	470	358
Open-circuit voltage — V_{oc} (V)	35.95	34.02	36.21	34.26	36.46	34.50	36.72	34.75	36.98	34.99
Short-circuit current — I_{sc} (A)	15.69	12.63	15.75	12.68	15.79	12.71	15.84	12.75	15.89	12.79
Maximum power voltage — V_{mp} (V)	30.05	28.32	30.28	28.59	30.51	28.85	30.75	29.11	30.99	29.37
Maximum power current — I_{mp} (A)	14.98	12.04	15.03	12.08	15.08	12.12	15.13	12.16	15.18	12.20
Cell efficiency	22.52		22.77		23.02		23.27		23.52	

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5, Flash test tolerance +4 %

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

ELECTRICAL CHARACTERISTICS WITH 10% REAR SIDE POWER GAIN

Total power Pmax/W	491	496	501	507	512
Vmp / V (Total)	30.05	30.28	30.51	30.75	30.99
Imp / A (Total)	16.33	16.38	16.44	16.49	16.55
Voc / V (Total)	35.95	36.21	36.46	36.72	36.98
Isc / A (Total)	17.10	17.16	17.21	17.27	17.32

STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	1762x1134x30mm
Weight	24kg
Cell	96 cells, N type Monocrystalline 182x105mm
Front glass	2.0mm, Anti-Reflection Coating
Back glass	2.0mm, Heat Strengthened Glass
Frame	Anodized aluminum alloy
Junction box	IP68, 3 bypass diodes
Output wire	4mm ²
Wire length	300mm/1100mm/customized
Connector	MC4 Compatible
Packing Specification	36 pcs/Pallet; 936 pcs/40' HQ

OPERATING PARAMETERS

Power tolerance (W)	(0~+4)
Maximum system voltage (V)	1500
Maximum rated fuse current (A)	30
Current operating temperature (°C)	-40~+85°C
Mechanical load	8000 Pa / 5400 Pa

TEMPERATURE RATINGS

Temperature coefficient (P_{max})	-0.30% / °C
Temperature coefficient (V_{oc})	-0.25% / °C
Temperature coefficient (I_{sc})	0.045% / °C
Nominal operating cell temperature	42±2 °C

MODULE DIMENSIONS (MM)

