

# **NORDIKA SERIES** 420W/440W

## NT6 N-Type **Ultra Black Bifacial**



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



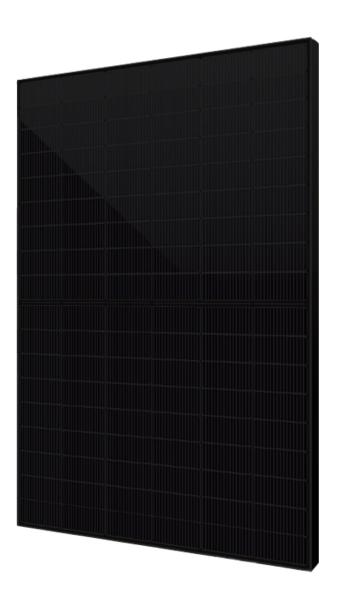
Industry leading lowest thermal co-efficient of power



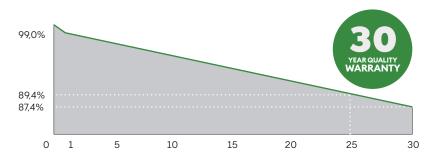
Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient



Passed kiwa hail test with a diameter of 55mm a speed of 33.9m per second



#### LINEAR PERFORMANCE WARRANTY









#### **ABOUT OMNIS POWER**

Omnis Power 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 Norway in addition to numerous partners around the world.

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



#### **ELECTRIC CHARACTERISTICS**

Model of modules	OP420M54-NT6-BF		OP425M54-NT6-BF		OP430M54-NT6-BF		OP435M54-NT6-BF		OP440M54-NT6-BF	
	STC	NOCT								
$\operatorname{Maximum\ power} - \operatorname{P}_{\operatorname{mp}}(\operatorname{W})$	420	316	425	320	430	324	435	325	440	329
Open-circuit voltage $-V_{oc}$ (V)	38.13	35.9	38.24	36	38.34	36.1	38.43	36	38.53	36.1
Short-circuit current $-I_{sc}(A)$	14.07	11.34	14.16	11.41	14.25	11.48	14.34	11.56	14.43	11.63
${\it Maximum power voltage-V_{mp}(V)}$	31.49	29.6	31.64	29.7	31.79	29.9	31.94	29.8	32.09	29.9
Maximum power current − I <sub>mp</sub> (A)	13.34	10.67	13.44	10.75	13.53	10.84	13.62	10.91	13.72	11.00
Cell efficiency (%)	21.51		21.76		22.02		22.28		22.53	

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 15% REAR SIDE POWER GAIN**

Total power Pmax/W	483	488.75	494.5	500.25	506
Vmp / V (Total)	31.49	31.64	31.79	31.94	32.09
Imp / A (Total)	15.34	15.45	15.56	15.66	15.77
Voc / V (Total)	38.13	38.24	38.34	38.43	38.53
Isc / A (Total)	16.18	16.28	16.39	16.49	16.59

#### STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	1722x1134x30mm
Weight	23.3kg
Cell	108 cells,N type Monocrystalline 182x91mm
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	4mm²
Wire length	300mm/1300mm/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 <sub>max</sub> )	-0.30% / °C
Temperature coefficient (V <sub>oc</sub> )	-0.25% / °C
Temperature coefficient $(I_{sc})$	-0.046% / °C
Nominal operating cell temperature	45±2°C

### **MODULE DIMENSIONS (MM)**



