

### Cortex NT5 Series N TOP-CON UltraBlack Bifacial

## NORDIKA SERIES 425W/430W/435W/440W/445W



100% triple EL test enabling remarkable reduction of hidden crack rate of modules



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# LINEAR PERFORMANCE WARRANTY 100,0% 91% 0 1 5 10 15 20 25

#### **PERFORMANCE INSURANCE**



#### **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.

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Today, Omnis Power is a European company with international experience that believes and invests 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**

#### OPXXXM54-NT5-BF

Model of modules	OP425M54-NT5-BF		OP430M54-NT5-BF		OP435M54-NT5-BF		OP440M54-NT5-BF		OP445M54-NT5-BF	
	STC	NOCT								
Maximum power — $P_{mp}(W)$	425	323	430	327	435	331	440	335	445	338
Open-circuit voltage — $V_{oc}$ (V)	38.20	36.70	38.30	36.80	38.40	36.90	38.60	37.10	38.70	37.20
Short-circuit current $- I_{sc}(A)$	14.15	11.40	14.23	11.47	14.31	11.53	14.39	11.60	14.47	11.66
Maximum power voltage $-$ V <sub>mp</sub> (V)	31.70	30.40	31.90	30.60	32.00	30.70	32.20	30.90	32.40	31.10
Maximum power current — $I_{mp}$ (A)	13.42	10.63	13.50	10.69	13.60	10.78	13.68	10.84	13.76	10.87
Module efficiency $-\eta_m$ (%)	21.80%		22.00%		22.30%		22.50%		22.80%	

STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25 °C , Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C , Spectra at AM1.5, Wind at 1m/s

#### **ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER BIN (REFERENCE TO 13.5% IRRADIANCE RATIO)**

Peak Power (Pmax) (W)	482	488	493	499	505
Open Circuit Voltage $(V_{oc})$ (V)	37.31	37.42	37.58	37.75	38.07
Short Circuit Current $(I_{sc})$ (A)	15.29	15.36	15.43	15.50	15.52
MPP Voltage $(V_{mp})$ (V)	31.38	31.59	31.91	32.22	32.49
MPP Current (I <sub>mp</sub> ) (A)	14.48	14.56	14.59	14.61	14.67

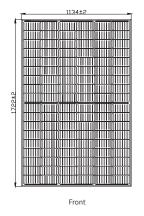
#### **STRUCTURAL CHARACTERISTICS**

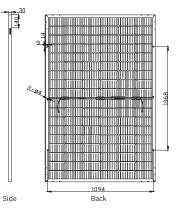
Module size (L*W*H)	1722 x 1134 x 30 mm
Weight	24.2 kg
Cell	108 cells, N-type Monocrystalline 182 x 91 mm
Front glass	2.0mm, Anti-Reflection Coating
Back glass	2.0mm, Heat Strengthened Glass
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Output wire	4.0 mm <sup>2</sup>
Wire length	1200mm
Connector	MC4 Compatible
Packing Specification	36pcs/Pallet; 936 pcs/40'HQ

#### **OPERATING PARAMETERS**

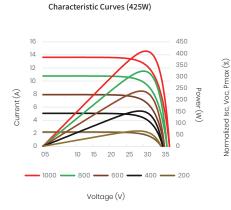
Power tolerance (W)	(0,+5)			
Maximum system voltage (V)	1500			
Maximum rated fuse current (A)	30			
Current operating temperature (°C )	-40~+85 °C			
Mechanical load	5400 Pa / 2400 Pa			
TEMPERATURE RATINGS				
Temperature coefficient (P <sub>max</sub> )	-0.32%/°C			
Temperature coefficient ( $V_{oc}$ )	-0.26 %/°C			
Temperature coefficient (I <sub>sc</sub> )	+0.046 %/°C			

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

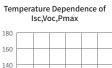




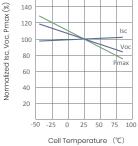
\* The unma rance is ±1 mm Length shown in mm



Nominal operating cell temperature



43±2°C



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT @2023 Omnis Power Engineering SpA - All rights reserved. Specifications included in this datasheet are subject to change without notice.

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