







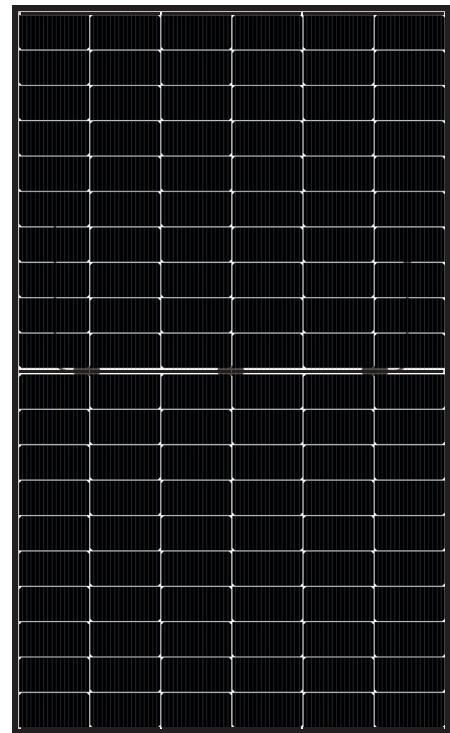


NORDIKA SERIES

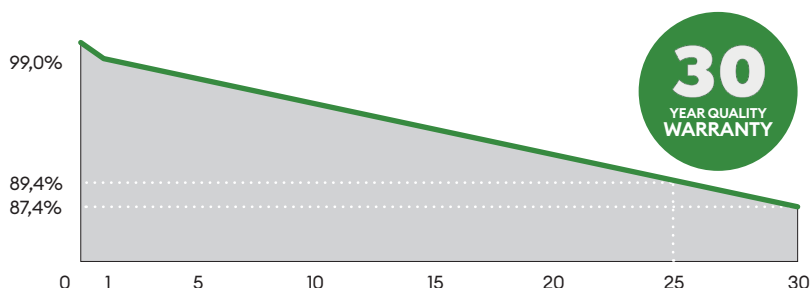
465W/485W

NT5 N-Type
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
-  Excellent low irradiance performance
-  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
-  100% triple EL test enabling remarkable reduction of hidden crack rate of modules



LINEAR PERFORMANCE WARRANTY



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.

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.

Model of modules	OP465M60-NT5-BF		OP470M60-NT5-BF		OP475M60-NT5-BF		OP480M60-NT5-BF		OP485M60-NT5-BF	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power — P_{mp} (W)	465	346	470	350	475	354	480	358	485	361
Open-circuit voltage — V_{oc} (V)	41.70	39.36	41.88	39.53	42.06	39.70	42.31	36.94	42.48	40.10
Short-circuit current — I_{sc} (A)	13.92	11.25	13.96	11.28	14.01	11.32	14.05	11.35	14.14	11.42
Maximum power voltage — V_{mp} (V)	35.33	33.07	35.69	33.41	35.92	33.63	35.96	33.66	36.11	33.80
Maximum power current — I_{mp} (A)	13.16	10.47	13.17	10.48	13.22	10.52	13.35	10.62	13.43	10.69
Module efficiency — η_m (%)	21.6		21.8		22.0		22.2		22.5	

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5, Flash test tolerance +- 3%
NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², 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 (P_{max}) (W)	515	521	526	532	537
Open Circuit Voltage (V_{oc}) (V)	41.70	41.88	42.06	42.31	42.48
Short Circuit Current (I_{sc}) (A)	15.42	15.47	15.52	15.57	15.67
Maximum power voltage — V_{mp} (V)	35.33	35.69	35.92	35.96	36.11
Maximum power current — I_{mp} (A)	14.58	14.59	14.65	14.79	14.88

STRUCTURAL CHARACTERISTICS

Module size (L*W*H)	1903 x 1134 x 30 mm
Weight	26.3kg
Cell	120 cells, N-type Monocrystalline 182x91 mm
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	4.0 mm ²
Wire length	300mm/1200mm/customized
Connector	MC4 original (EVO2)
Packing Specification	36 pcs/Pallet; 864 pcs/40'HQ

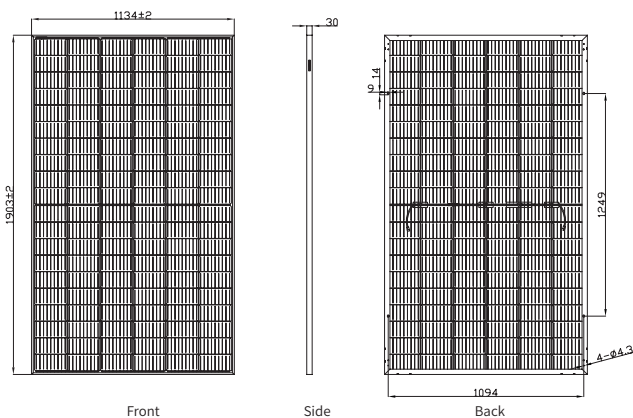
OPERATING PARAMETERS

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

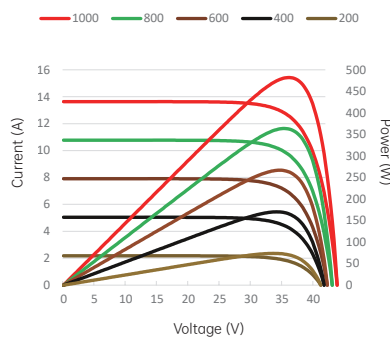
Temperature coefficient (P_{max})	-0.30 %/°C
Temperature coefficient (V_{oc})	-0.26 %/°C
Temperature coefficient (I_{sc})	+0.046 %/°C
Nominal operating cell temperature	43±2 °C

MODULE DIMENSIONS (MM)



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

Characteristic Curves (480W)



Temperature Dependence of I_{sc}, V_{oc}, P_{max}

