

# Cortex NT3 Series N-TOPCON Bifacial

# 565W/570W/575W/580W

Cortex<sup>™</sup> series of solar modules by Omnis Solar Power are very powerful which provide the world-class performance. The Cells and raw materials structure design ensures the maximized of sunlight and enhances the reliability. Cortex<sup>™</sup> includes the most leading technologies of solar cells like PERC, N-Topcon, HJT, and shingled. After years of effort, Cortex is able to increase customer's vale beyond the efficiency, the performance and durability under real conditions makes our customers succeed no matter in residential or commercial applications.



# Highlight



#### **Higher Efficiency**

The leading high efficiency of solar cells ensures the high output powerwhich making it more sufficient in limited space.



#### **Lower Power Degradation**

Ensured PID resistance through cell process and module material control to help harvest more. Cortex is guaranteed ONLY 0.4% annual power degradation in 30 years.





#### Warranty Extended Up To 30 Years

Cortex provide 30 years warranty of product materials and workmanship which is leading the whole industry.



#### **Durability In Extreme Conditions**

Cortex is passed the test by salt mist, ammonia and mechanical loads up to 5400pa positive.

# About Omnis Solar Power

In the year of 2010, Omnis Solar Power was created by a group of passionate people in U.S who are dedicating into renewable energies. Since more than 10 Years, Omnis Solar Power has grown to become one of the most innovative and dependable solar product and solution provider. Omnis Solar Power offers sustainability and brings the future to both commercial and residential applications worldwide with top-of-the-line solar products, solutions, and services. Being an qualified PV company means operating in a way that reflects our values and mission to provide our partners with the innovation and quality they deserve. Omnis Solar Power is committed to upholding the standards and responsibility that made us one of the best.





## **Electrical Data (STC)**

Part Number	OP565M72-NT3-BF	OP570M72-NT3-BF	OP575M72-NT3-BF	OP580M72-NT3-BF
Peak Power Watts-P <sub>MAX</sub> (Wp)*	565	570	575	580
Power Output Tolerance	0~±3%			
Open Circuit Voltage-Voc(V)	50.87	51.07	51.27	51.47
Short Circuit Current-Isc(A)	14.19	14.25	14.31	14.37
Maximum Power Voltage-V <sub>MPP</sub> (V)	42.14	42.29	42.44	42.59
Maximum Power Current-I <sub>MPP</sub> (A)	13.41	13.48	13.55	13.62
Panel Efficiency(%)	21.87	22.07	22.26	22.45

STC :Irradiance 1000w/m<sup>2</sup>,Cell Temperature 25°C

# **Electrical Data (NOCT)**

MaximumPower-P <sub>MAX</sub> (Wp)*	425	429	432	436
Open Circuit Voltage-Voc(V)	48.32	48.51	48.70	48.89
Short Circuit Current-Isc(A)	11.46	11.50	11.55	11.60
Maximum Power Voltage-V <sub>MPP</sub> (V)	39.52	39.65	39.78	39.87
Maximum Power Current-I <sub>MPP</sub> (A)	10.75	10.81	10.87	10.94

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## **Mechanical Data**

Panel Dimension(H/W/0)	2278x1134x30mm	
Weight	32kg	
Cell Туре	N type Mono-crystalline	
Cell Number	120	
Front Glass	2.0mm, Anti-Reflection Coating	
Back Glass	2.0mm, Heat Strengthened Glass	
Frame Type	Anodized Aluminium Alloy	
Junction Box Protection Class	IP 68	
Cables	TUV 1×4.0mm <sup>2</sup>	
	(+): 400mm , (-): 200mm or Customized Length	

# **Temperature Ratings**

NOCT	45°C(±2°C)
Temperature Coefficient of PMAX	-0.30%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.046%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

#### Warranty

**30 years Output Power Warranty** 

# **Maximum Ratings**

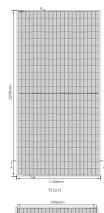
Operational Temperature	-40~±85 °C
Front/Rear Side Load	5400/2400pa
Max Series Fuse Rating	30A
Max System Voltage	1500V (IEC)
Fire Rating	Class 1(UNI9177)

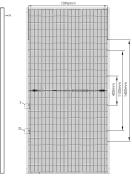
# **Packaging Configuration**

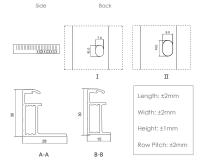
Modules per box:36 pieces

#### Modules per 40'container:720 pieces

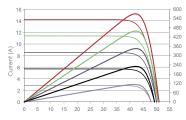
#### **DIMENSIONS OF PV MODULE(mm)**





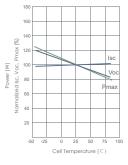


#### Current-Voltage & Power-Voltage Curves





#### Temperature Dependence of Isc,Voc,Pmax





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