

DATASHEET CORTEX P4 SERIRS-BIFACIAL

645W/650W/655W/660W/665W

Cortex[™] series of solar modules by Omnis 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[™] includes the most leading technologies of solar cells like PERC,N type, Multiple busbar, and bifacial. 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



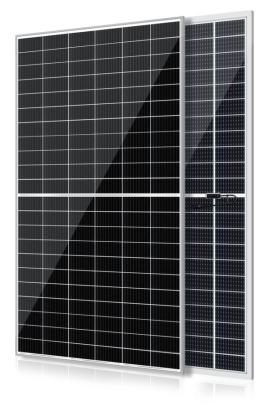
Higher Efficiency

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 0.5% annual power degradation is 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 Power

In the year of 2010, Omnis power was created by a group of passionate people in U.S who are dedicating into renewable energies. Since more than 10 Years, Omnis Power has grown to become one of the most innovative and dependable solar product and solution provider. Omnis Power, with an annual capacity of 3 GW, 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 Power is committed to upholding the standards and responsibility that made us one of the best.





ELECTRICAL DATA(STC)

Part Number	OP645M60-P4-BF	OP650M60-P4-BF	OP655M60-P4-BF	OP660M60-P4-BF	OP665M60-P4-BF
Peak Power Watts-P _{Max} (Wp)*	645	650	655	660	665
Power Output Tolerance	0~5W				
Open Circuit Voltage-Voc(V)	45.30	45.50	45.70	45.90	46.10
Short Circuit Current-Isc(A)	18.31	18.50	18.40	18.45	18.50
Maximum Power Voltage-V _{MPP} (V)	37.50	37.70	37.90	38.10	38.30
Maximum Power Current-I _{MPP} (A)	17.23	17.27	17.31	17.35	17.39
Panel Efficiency(%)	20.80	20.90	21.10	21.20	21.40

STC :Irradiance 1000w/m²,Cell Temperature 25°C Air Mass AM1.5 *Measuring tolerance: ±3%.

ELECTRICAL DATA(NOCT)

MaximumPower-P _{MAX} (Wp)*	488	492	495	499	504
Open Circuit Voltage-Voc(V)	42.70	42.90	43.00	43.20	43.40
Short Circuit Current-Isc(A)	14.75	14.79	14.83	14.87	14.91
Maximum Power Voltage-V _{MPP} (V)	34.90	35.10	35.20	35.40	35.60
Maximum Power Current-I _{MPP} (A)	13.98	14.01	14.05	14.10	14.16

NOCT: Irradiance at 800W/m². Ambient Temperature 20°C. Wind Speed 1m/s

MECHANICAL DATA

Panel Dimension(H/W/0)	2384 x 1303 x 35 mm	
Weight	38.7kg	
Cell Туре	Monocrystalline	
Cell Number	132	
Front Glass	2.0 mm, High Transmission,	
	AR Coated Heat Strengthened Glass	
Encapsulant material	POE/EVA	
Back Glass	2.0mm, Heat Strengthened Glass (White Grid Glass)	
Frame	35mm Anodized Aluminium Alloy	
J-Box	IP 68 rated	
Cables	Photovoltaic Technology Cable 4.0mm ²	
	Portrait: 350/350 mm	
	Length can be customized	
Connector	MC4 EVO2 / MC4 Compatible	

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C(±3°C)
Temperature Coefficient of P _{MAX}	-0.34%/°C
Temperature Coefficient of V _{oc}	-0.25%/°C
Temperature Coefficient of Isc	-0.04%/°C

MAXIMUM RATINGS

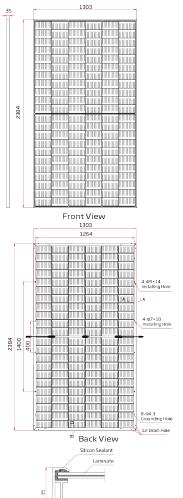
Operational Temperature	-40~±85 °C
Max System Voltage	1500V DC(IEC)
Max Series Fuse Rating	35A

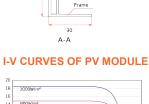
PACKAGING CONFIGURATION

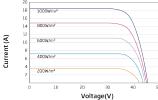
Modules per box:31 pieces

Modules per 40'container:558 pieces

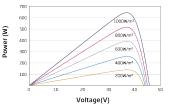
DIMENSIONS OF PV MODULE(mm)



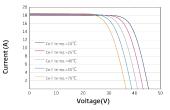




P-V CURVES OF PV MODULE



I-V CURVES OF PV MODULE



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

30 years Product	Workmanship	Warranty
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Omnis Power USA Inc

+1(323) 7233616

100 N Howard ST STE R, Spokane, Washington 99201, USA

support@omnispower.com

30 years Output Power Warranty

OMNISPOWER

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to change without notice. Version Number:OP_EN2021_GLOBAL_01

Country of Origin: China or Vietnam

