

### DATASHEET

CORTEX SHINGLED BLACK SERIES
MONO FULL BLACK MODULE

# 395W/400W/405W/410W/415W

Cortex<sup>™</sup> 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<sup>™</sup> 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



### Shingling Technology

Innovative struture, low-temperature adhesive bonding, high-density layout. Uniform layout with better aesthetic.



### Warranty Extended Up To 25 Years

Cortex provide 25 years warranty of product materials and workmanship which is leading the whole industry.



### 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.



### **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	OP395M60B-SAS1	OP400M60B-SAS1	OP405M60B-SAS1	OP410M60B-SAS1	OP415M60B-SAS1
Peak Power Watts-PMAX(Wp)*	395	400	405	410	415
Power Output Tolerance	0~+3%				
Maximum Power Voltage-VMPP(V)	38.50	38.60	38.70	38.80	38.90
Maximum Power Curret-IMPP(A)	10.26	10.36	10.47	10.57	10.67
Open Circuit Voltage-Voc(V)	46.30	46.40	46.50	46.60	46.70
Short Circuit Current-Isc(A)	10.92	10.97	11.02	11.07	11.12
Panel Efficiency (%)	20.20	20.40	20.70	20.90	21.20

STC :lrradiance 1000w/m²,AM1.5;environmental temperature 25°c;tested according to EN 60904-3

## **ELECTRICAL DATA(NMOT)**

MaximunPower-P <sub>MAX</sub> (Wp)	297	301	305	309	312
Maximun Power Voltage-VMPP(V)	36.70	36.80	36.90	37.00	37.10
Maximum Power Current-IMPP(A)	8.10	8.18	8.27	8.35	8.43
Open Circuit Voltage-V₀₀(V)	44.10	44.20	44.30	44.40	44.50
Short Circuit Current-Isc(A)	8.81	8.85	8.89	8.93	8.97

NMOT :Irradiance 800w/m², wind speed 1m/s; environmental temperature 20°C

### MECHANICAL DATA

Panel Dimension(H/W/0)	1719x1140x35mm	
Weight	22.0kg	
Front glass	3.2mm toughened glass	
Cell	Monocrystalline PERC 166x166mm	
Backplate	High weather resistance	
Frame	Anodic alumina profile	
Junction box	IP68,TUV,2 diodes	
Cable	1000m long,4mm <sup>2</sup> cross section,customizable	
Connector	MC4 compatible/original EVO2	

### TEMPERATURE RATINGS

17	
NMOT	42.30±2°C
Open circuit voltage temperature Coefficient	-0.27%/°C
Short circuit voltage temperature Coefficient	+0.04%/°C
Maximum power temperature Coefficient	-0.34%/°C

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

# WARRANTY

25 years Product Workmanship Warranty
30 years Power Warranty

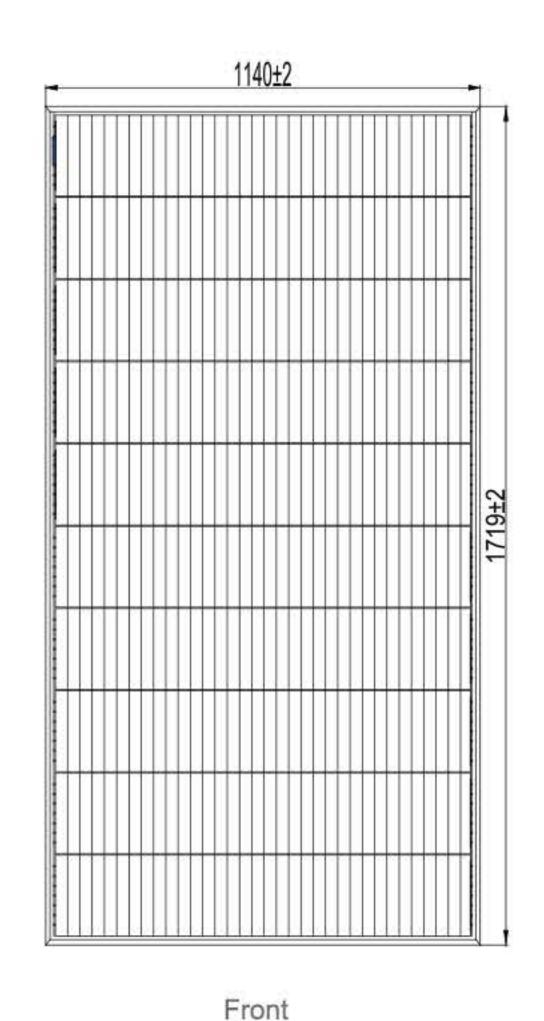
### MAXIMUM RATINGS

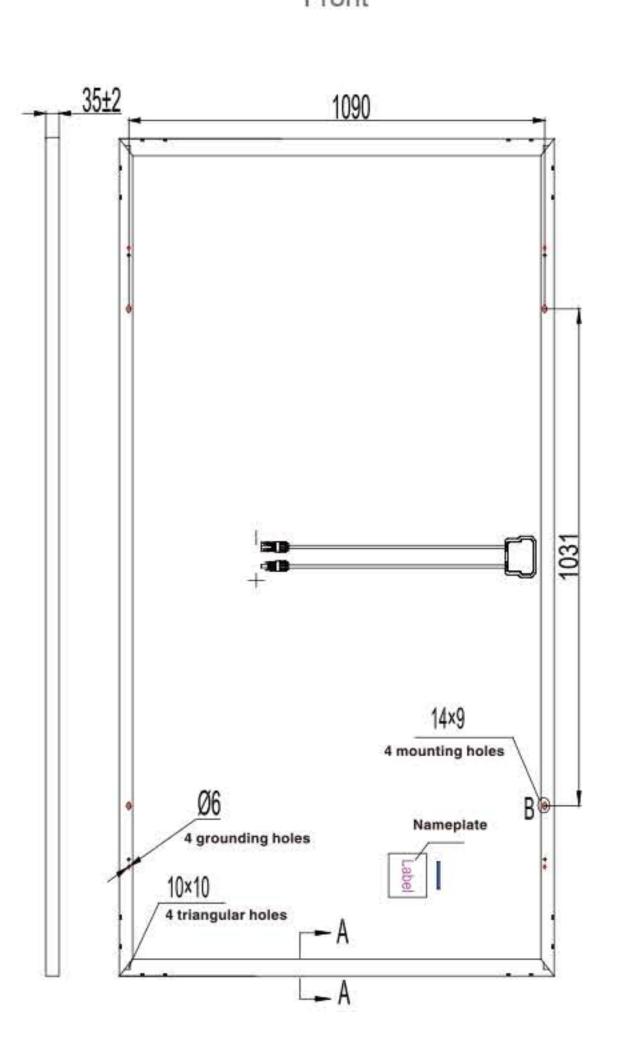
Maximum system voltage(V)		1500 (IEC)	
Maximum fuse rated current(A)		20	
Maximum front staic load(Pa)		5400	
Working temperature(°C)		-40~+85	
Hail resistance	Maximum diameter 25mm, impact speed 23m/s		

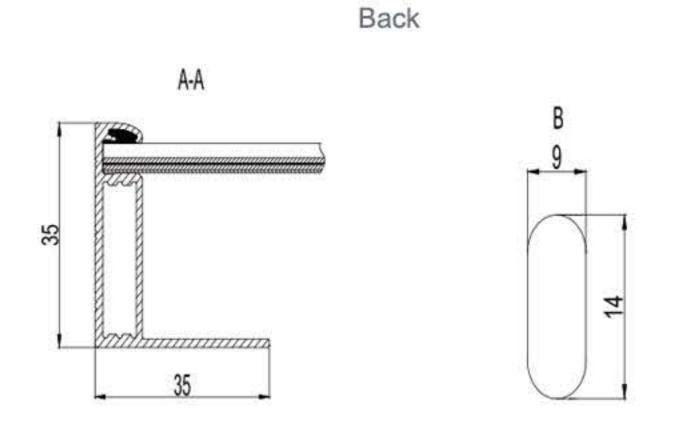
### PACKAGING CONFIGURATION

(Two pallets = One stack)
31pcs/pallets,806pcs/40'HQ

#### DIMENSIONS OF PV MODULE(mm)







### I-V Curve

