

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

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™ 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



#### **Warranty Extended Up To 25 Years**

Cortex provide25 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 in 30 years.



#### **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	OP400M54-P3-B	OP405M54-P3-B	OP410M54-P3-B	OP415M54-P3-B
Peak Power Watts-P <sub>MAX</sub> (Wp)*	400	405	410	415
Power Output Tolerance	0~±3%			
Open Circuit Voltage-Voc(V)	36.98	37.06	37.14	37.31
Short Circuit Current-Isc(A)	13.78	13.85	13.92	14.01
Maximum Power Voltage-V <sub>MPP</sub> (V)	30.42	30.52	30.62	30.79
Maximum Power Current-I <sub>MPP</sub> (A)	13.15	13.27	13.39	13.48
Panel Efficiency(%)	20.48	20.74	21.00	21.25

STC :Irradiance 1000w/m²,Cell Temperature 25°C

## **Electrical Data (NOCT)**

MaximumPower-P <sub>MAX</sub> (Wp)*	298	301	305	309
Open Circuit Voltage-Voc(V)	34.90	34.98	35.05	35.21
Short Circuit Current-Isc(A)	11.13	11.19	11.24	11.32
Maximum Power Voltage-V <sub>MPP</sub> (V)	28.42	28.56	28.72	28.88
Maximum Power Current-I <sub>MPP</sub> (A)	10.47	10.55	10.62	10.69

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

#### **Mechanical Data**

Panel Dimension(H/W/0)	1722 x 1134 x 30 mm
Weight	20.7kg
Cell Type	Monocrystalline PERC
Cell Size	182x91 mm
Cell Number	108
Glass Type	3.2mm, High Transmission tempering Glass
Encapsulant Type	EVA
Frame Type	Black Anodized Aluminium Alloy
Junction Box Diodes	3
Junction Box Protection Class	IP68
Connector Type	MC4 or MC 4 Compitable
Cable	1x4mm² ,(+): 1100mm , (-): 1100mm or Customized Length

### **Temperature Ratings**

NOCT	41°C(±3°C)
Temperature Coefficient of P <sub>MAX</sub>	-0.34%/°C
Temperature Coefficient of V₀c	-0.25%/°C
Temperature Coefficient of Isc	+0.04%/°C

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

### Warranty

25 years Product Workmanship Warranty
30 years Output Power Warranty

### **Maximum Ratings**

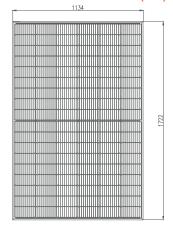
Operational Temperature	-40~±85 °C
Front/Rear Side Load	5400/2400pa
Max Series Fuse Rating	25A
Max System Voltage	1500V (IEC)
Fire Rating	Class 1(UNI9177)

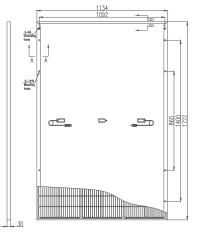
### **Packaging Configuration**

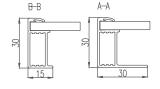
Modules per box:36 pieces

Modules per 40'container:936 pieces

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







#### **CURVES OF PV MODULE**

