

645W/650W/655W 660W/665W/670W

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-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 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 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 | OP645M66-P4 | OP650M66-P4 | OP655M66-P4 | OP660M66-P4 | OP665M66-P4 | OP670M66-P4 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Peak Power Watts-P _{MAX} (Wp)* | 645 | 650 | 655 | 660 | 665 | 670 |
| Power Output Tolerance | 0~5W | | | | | |
| Open Circuit Voltage-Voc(V) | 45.10 | 45.30 | 45.50 | 45.70 | 45.60 | 46.10 |
| Short Circuit Current-Isc(A) | 18.39 | 18.44 | 18.48 | 18.53 | 18.57 | 18.65 |
| Maximum Power Voltage-V _{MPP} (V) | 37.20 | 37.40 | 37.60 | 37.80 | 38.00 | 38.20 |
| Maximum Power Current-I _{MPP} (A) | 17.35 | 17.39 | 17.43 | 17.47 | 17.51 | 17.55 |
| Panel Efficiency(%) | 20.80 | 20.90 | 21.10 | 21.20 | 21.40 | 21.60 |

STC :Irradiance 1000w/m²,Cell Temperature 25°C,Measure Tolerance :+/- 3%

Electrical Data (NOCT)

| MaximumPower-P _{MAX} (Wp)* | 488 | 492 | 496 | 500 | 504 | 508 |
|--|-------|-------|-------|-------|-------|-------|
| Open Circuit Voltage-Voc(V) | 42.50 | 42.70 | 42.90 | 43.00 | 43.20 | 43.4 |
| Short Circuit Current-Isc(A) | 14.82 | 14.86 | 14.89 | 14.93 | 14.96 | 15.01 |
| Maximum Power Voltage-V _{MPP} (V) | 34.80 | 34.90 | 35.10 | 35.30 | 35.40 | 35.60 |
| Maximum Power Current-Impp(A) | 14.05 | 14.09 | 14.13 | 14.17 | 14.22 | 14.26 |

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

Mechanical Data

| Solar Cells | Monocrystalline |
|----------------------|---|
| No.of cells | 132cells |
| Module Dimensions | 2384 x 1303 x 35mm |
| Weight | 34.4kg |
| Glass | 3.2mm,High Transmission tempering Glass |
| Encapsulant material | EVA |
| Backsheet | White |
| Frame | 35mm Anodized Aluminium Alloy |
| J-Box | IP68 rated |
| Cable | Photocoltaic Technology Cable 4.0mm²,Portrait:350/350mm Length can be customized |
| Connector | MC4 or MC4 Compatible |

Temperature Ratings

| NOCT | 43°C(±2°C) |
|---|------------|
| Temperature Coefficient of P _{MAX} | -0.34%/°C |
| Temperature Coefficient of V₀c | -0.25%/°C |
| Temperature Coefficient of Isc | +0.05%/°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

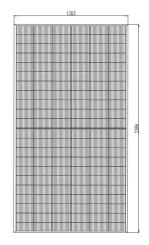
Maximum Ratings

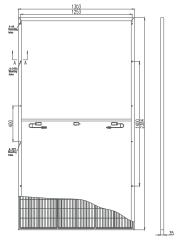
| Operational Temperature | -40~±85 °C | | |
|-------------------------|------------------|--|--|
| Front/Rear Side Load | 5400/2400pa | | |
| Max Series Fuse Rating | 30A | | |
| Max System Voltage | 1500V (IEC) | | |
| Fire Rating | Class 1(UNI9177) | | |

Packaging Configuration

Modules per box:31 pieces Modules per 40'container:558 pieces

DIMENSIONS OF PV MODULE(mm)







CURVES OF PV MODULE

