CORTEX™

Cortex P4 Series
Bifacial

590W/595W/600W/605W

Cortex™ 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 30 Years

Cortex provide 30 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.

OMNIS SOLAR POWER

CORTEX™

OPXXXM60-P4-BF

Electrical Data (STC)

Part Number	OP590M60-P4	OP595M60-P4	OP600M60-P4	OP605M60-P4
Peak Power Watts-P_{MAX}(Wp)*	590	595	600	605
Power Output Tolerance	0~±3%			
Open Circuit Voltage-V_{OC}(V)	41.00	41.30	41.50	41.70
Short Circuit Current-I_{SC}(A)	18.42	18.47	18.52	18.57
Maximum Power Voltage-V_{MPP}(V)	34.00	34.20	34.40	34.60
Maximum Power Current-I_{MPP}(A)	17.35	17.40	17.44	17.49
Panel Efficiency(%)	20.80	21.00	21.20	21.40

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

Electrical Data (NOCT)

MaximumPower-P_{MAX}(Wp)*	447	451	454	458
Open Circuit Voltage-V_{OC}(V)	38.70	38.90	39.10	39.30
Short Circuit Current-I_{SC}(A)	14.85	14.88	14.92	14.96
Maximum Power Voltage-V_{MPP}(V)	31.70	31.90	32.00	32.20
Maximum Power Current-I_{MPP}(A)	14.09	14.13	14.18	14.22

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

Mechanical Data

Panel Dimension(H/W/0)	2172 x1303 x 35mm
Weight	35kg
Cell Type	Monocrystalline
Cell Size	210x105 mm
Cell Number	120
Glass Type	Tempered,Anti-reflection Coating
Glass Thickness	2.0mm + 2.0mm
Encapsulant Type	EVA /POE
Frame Type	Anodized Aluminium Alloy
Junction Box Diodes	3
Junction Box Protection Class	IP68
Connector Type	MC4 or MC 4 Compitable
Cable	1x4mm² ,(+): 350mm , (-): 350mm or Customized Length

Temperature Ratings

NOCT	41°C(±3°C)
Temperature Coefficient of P_{MAX}	-0.36%/°C
Temperature Coefficient of V_{OC}	-0.28%/°C
Temperature Coefficient of I_{SC}	+0.05%/°C

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

Maximum Ratings

Operational Temperature	-40~±85 °C
Front/Rear Side Load	5400/2400pa
Max Series Fuse Rating	35A
Max System Voltage	1500V (IEC)
Fire Rating	Class 1(UNI9177)

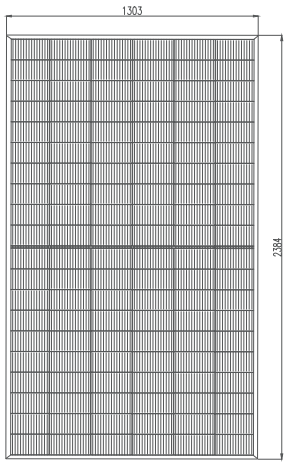
Warranty

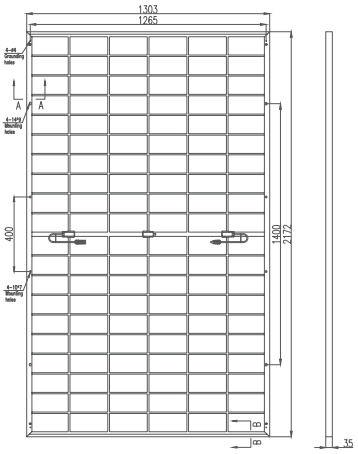
30 years Product Workmanship Warranty
30 years Output Power Warranty

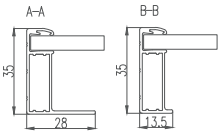
Packaging Configuration

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

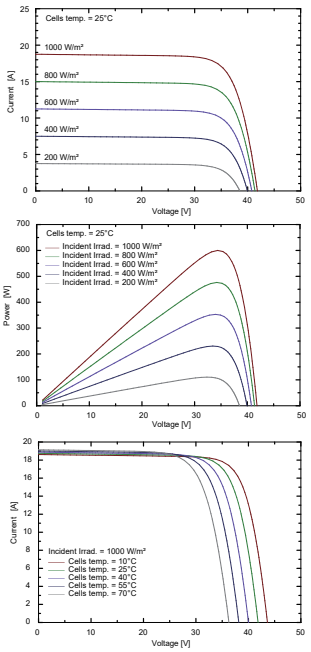
DIMENSIONS OF PV MODULE(mm)







CURVES OF PV MODULE



OMNIS SOLAR POWER

Omnis Power USA Inc.
100 N Howard ST STE R, Spokane, Washington 99201, USA
+1(323) 7233616 support@omnispower.com

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