



18.9 % EFFICIENCY

UP TO 315W

60 CELLS

 **2015** TOP SOLAR PRODUCTS

99% relative efficiency at weak-light
Because a 3% increase in yield is better than nothing.



25 year linear performance guarantee
15 year product warranty.



Protection against the weather and the elements
Because long term performance matters.



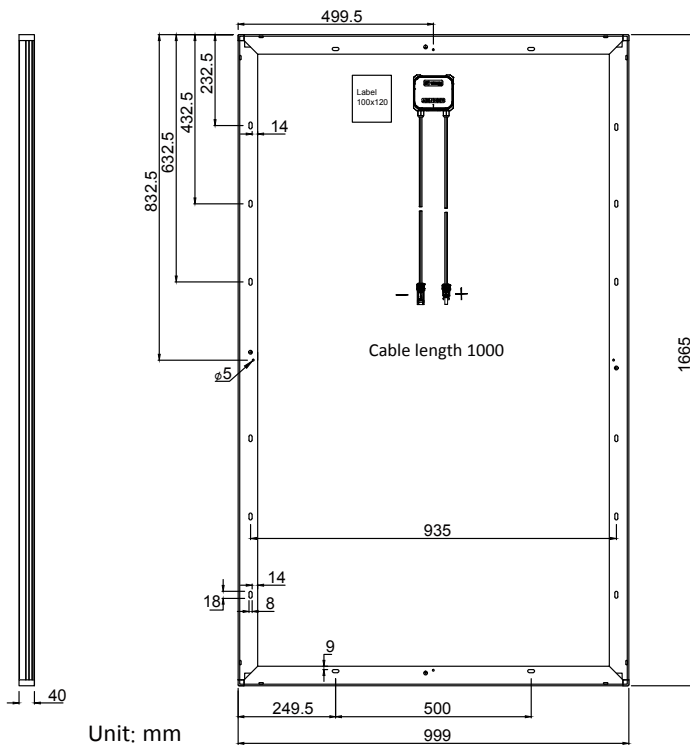
2 years of free insurance included
Because you never know what tomorrow might bring.



Designed for fire safety
Because plant fires mean more than financial losses alone.



Made in Taiwan
Home of high precision semiconductor manufacturing.



Unit: mm

Mechanical data

Cell	Monocrystalline 156.75 x 156.75 mm silicon cells
Quantity and wiring of cells	60 in series
Dimensions	1,665 x 999 x 40 mm (65.55 x 39.33 x 1.57 in)
Weight	19.6 kg (43.2 lbs)
Glass thickness	3.2 mm (0.13 in)
Frame	Black anodised aluminium
Junction box	IP67
Connector type	MC4 (PV-KBT4/PV-KST4) IP68; QC4.10 IP67
Module fire performance	Type 1

Operating conditions

Operating temperature	-40 °C to +85 °C -40 °F to +185 °F
Maximum system voltage IEC/UL	1,000 V/1,000 V
Maximum series fuse	25 A
Maximum load	5,400 Pa
Nominal operating cell temperature NOCT	45 ± 3 °C
Temperature coefficient of P _{MAX}	-0.43%/°C
Temperature coefficient of V _{OC}	-0.29%/°C
Temperature coefficient of I _{SC}	0.06%/°C

Certifications

IEC 61215, IEC 61730-1/-2, UL 1703 Ed. 3, MCS, CE

Electrical data (STC)		WSP-310M6	WSP-315M6	
Nominal performance	P _{MAX}	310	315	Wp
Voltage at maximum performance	V _{MP}	32.9	33.2	V
Current at maximum performance	I _{MP}	9.42	9.48	A
Open circuit voltage	V _{OC}	40.3	40.4	V
Short circuit current	I _{SC}	10.1	10.2	A
Module efficiency		18.6	18.9	%
Power tolerance		-0/+5		W

Reduction in the module efficiency rating from 1,000 W/m² to 200 W/m²: < 4%. The electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m² with light spectrum AM 1.5, with cell temperature 25 °C. Measurement tolerance of P_{MAX} at STC: ±3%. Accuracy of other electrical data: ±10%.

Electrical data (NOCT)		WSP-310M6	WSP-315M6	
Nominal performance	P _{MAX}	230	234	Wp
Voltage at maximum performance	V _{MP}	30.2	30.5	V
Current at maximum performance	I _{MP}	7.62	7.67	A
Open circuit voltage	V _{OC}	38.1	38.2	V
Short circuit current	I _{SC}	8.11	8.19	A

The electrical data applies under normal operating cell temperature (NOCT): solar radiation 800 W/m², AM 1.5, air temperature 20 °C, wind speed 1 m/s.



This frame design, produced entirely from aluminium, guarantees the maximum stability and protection against material fatigue. The rounded corner elements provide greater torsional stiffness and waterproofing in the critical corner areas where the material is at its weakest. In contrast to corner connections that use mitred cuts or threaded connections, WINAICO corner pieces guarantee the best possible transfer of tension across each section of the frame.



WINAICO is a trademark of Win Win Precision Technology Co., Ltd.
 WINAICO Australia Pty Ltd
 3/393 George Street, Sydney NSW 2000, Australia
 Tel + 61 2 8091 2771 · australia@winaico.com · www.winaico.com