



**18.9 % EFFICIENCY**

**UP TO 315W**

**60 CELLS**



**EUPD RESEARCH**

**TOP BRAND PV**

MODULES

GERMANY

**2018**

**EUPD RESEARCH**

**TOP BRAND PV**

MODULES

AUSTRALIA

**2018**



**Exceeds the IEC standard 3 times over**  
Because standards are there to be surpassed.



**Low series resistance**  
Because we want best yields for you.



**PERC Technologies**  
Because a 3% increase in yield is better than nothing.



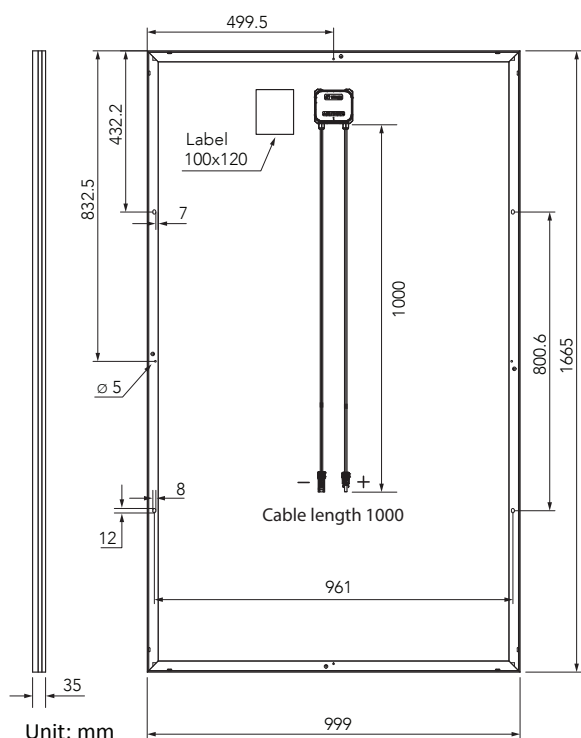
**15 year product warranty**  
25 year linear performance guarantee.



**10 years of WINAICO quality modules**  
WINAICO has been providing the global market with quality solar panels for over 10 years.



**100% electroluminescence test**  
Because we only deliver premium solar modules.



### Mechanical data

Cell	Monocrystalline 156.75 x 156.75 mm
Quantity and wiring of cells	60 in series
Dimensions	1,665 x 999 x 35 mm (65.55 x 39.33 x 1.38 in)
Weight	18.6 kg (41.0 lbs)
Glass thickness	3.2 mm (0.13 in)
Frame	Black anodised aluminium
Junction box	IP 67
Connector type	MC4 (PV-KBT4/PV-KST4) IP68; QC4.10 IP67
Module fire performance	Type 4
Fire safety class	C

### 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	20 A
Maximum design load (+) / (-)	3,600 Pa / 2,400 Pa
Maximum test load (+) / (-)	5,400 Pa / 3,600 Pa
Nominal Module Operating Temperature NMOT	45 ± 3 °C
Temperature coefficient of P <sub>MAX</sub>	-0.41 %/°C
Temperature coefficient of V <sub>OC</sub>	-0.29 %/°C
Temperature coefficient of I <sub>SC</sub>	0.04 %/°C

### Certifications

IEC 61215-1:2016, IEC 61215-2:2016, IEC 61730-1:2016, IEC 61730-2:2016

Electrical data (STC)		WST-310M6	WST-315M6	
Nominal performance	P <sub>MAX</sub>	310	315	Wp
Voltage at maximum performance	V <sub>MP</sub>	32.91	33.24	V
Current at maximum performance	I <sub>MP</sub>	9.42	9.48	A
Open circuit voltage	V <sub>OC</sub>	40.25	40.40	V
Short circuit current	I <sub>SC</sub>	10.06	10.16	A
Module efficiency		18.64	18.94	%
Power tolerance		-0/+5		W

The electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m<sup>2</sup> with light spectrum AM 1.5, with cell temperature 25 °C. Measurement tolerance of P<sub>MAX</sub> at STC: ±3%. Accuracy of other electrical data: ±10%.

Electrical data (NMOT)		WST-310M6	WST-315M6	
Nominal performance	P <sub>MAX</sub>	226	229	Wp
Voltage at maximum performance	V <sub>MP</sub>	30.24	30.54	V
Current at maximum performance	I <sub>MP</sub>	7.46	7.51	A
Open circuit voltage	V <sub>OC</sub>	37.92	38.06	V
Short circuit current	I <sub>SC</sub>	7.96	8.04	A

The electrical data applies under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20 °C, wind speed 1 m/s.



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