



**17.7 % EFFICIENCY**

**UP TO 295 W**

**60 CELLS**



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



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



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



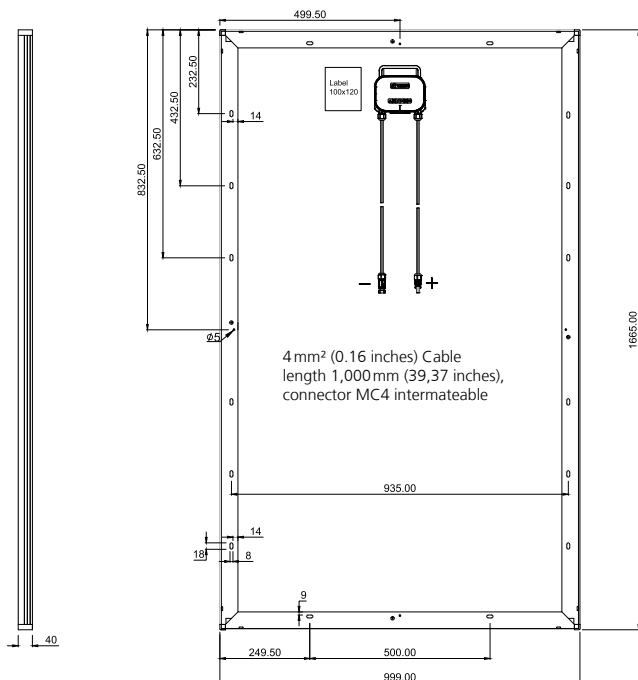
**25 year linear performance guarantee**  
12 year product warranty.



**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.



WSP series Rear view

**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

**Operating conditions**

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

**Certifications**

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

Electrical data (STC)		WSP-280M6	WSP-285M6	WSP-290M6	WSP-295M6	
Nominal performance	P <sub>MAX</sub>	280	285	290	295	Wp
Voltage at maximum performance	V <sub>MP</sub>	31.4	31.8	32.1	32.3	V
Current at maximum performance	I <sub>MP</sub>	8.93	8.98	9.03	9.14	A
Open circuit voltage	V <sub>OC</sub>	38.5	38.6	38.8	39.2	V
Short circuit current	I <sub>SC</sub>	9.44	9.54	9.64	9.75	A
Module efficiency		16.8	17.2	17.4	17.7	%

Reduction in the module efficiency rating from 1,000 W/m<sup>2</sup> to 200 W/m<sup>2</sup>: < 4%. 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 (NOCT)		WSP-280M6	WSP-285M6	WSP-290M6	WSP-295M6	
Nominal performance	P <sub>MAX</sub>	207	211	214	218	Wp
Voltage at maximum performance	V <sub>MP</sub>	28.6	29.0	29.3	29.7	V
Current at maximum performance	I <sub>MP</sub>	7.23	7.27	7.31	7.35	A
Open circuit voltage	V <sub>OC</sub>	35.2	35.4	35.6	35.7	V
Short circuit current	I <sub>SC</sub>	7.58	7.66	7.74	7.82	A

The electrical data applies under normal operating cell temperature (NOCT): solar radiation 800 W/m<sup>2</sup>, AM 1.5, air temperature 20°C, wind speed 1 m/s.

**Good to know**



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 Deutschland GmbH · Industriestraße 68 · 97993 Creglingen · Germany  
Phone +49 7933 700 300 · Fax +49 7933 700 3010 · www.winaico.com