

# Power to Perform





## Tested 3 times above IEC standard

Because standards are there to be surpassed.



99 % relative efficiency at weak-light

Because a 3 % increase in yield makes a big difference.



# Protection against the weather and the elements

Because long term performance matters.



# **Designed for fire safety**

Because plant fires mean more than financial losses alone.



# We've thought of everything

Because you want to enjoy your solar investment worry-free.







CONTROLLED GOODS FLOW



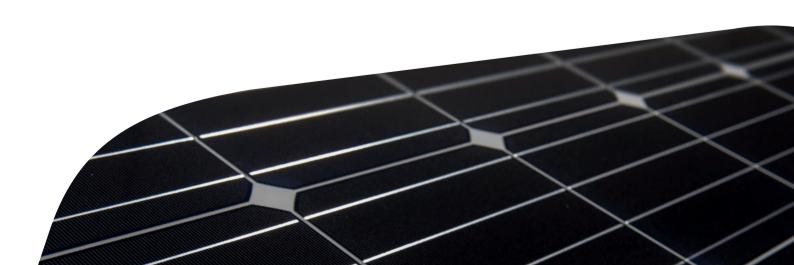
EL-CHECKE



# Full plant protection for up to 10 years

Because it's good to know that provisions are in place.

Product guarantee for up to 12 years Linear 25-year performance guarantee Positive tolerances 0/+5 Wp





### Mechanical data

Monocrystalline 156.75 x 156.75 mm silicon cells

Quantity and wiring of cells 60 in series

1,665 x 999 x 40 mm (65.55 x 39.33 x 1.57 in) Dimensions

19.6 kg (43.2 lbs) Weight Glass thickness 3 2 mm (0 13 in) Frame Black anodised aluminium

Junction box IP 65

QC Solar / QC4 (IP67); Multi-contact / MC4 (IP67); Connector Type:

Tvco / PV4 (IP67)

### 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 reverse current 15 A Maximum load 5,400 Pa Nominal operating cell temperature NOCT 45±3°C Temperature coefficient of P<sub>MAX</sub> Temperature coefficient of V<sub>oc</sub> -0.48 %/°C −0.35 %/°C Temperature coefficient of I 0.05 %/°C

### Certifications

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

Electrical data (STC)		WSP-285M6	WSP-290M6	WSP-295M6	WSP-300M6	WSP-305M6	
Nominal performance	$P_{MAX}$	285	290	295	300	305	Wp
Voltage at maximum performance	$V_{MP}$	31.8	32.1	32.3	32.3	32.6	V
Current at maximum performance	I <sub>MP</sub>	8.98	9.03	9.14	9.31	9.36	А
Open circuit voltage	$V_{oc}$	38.6	38.8	39.2	39.8	40.1	V
Short circuit current	$I_{SC}$	9.54	9.64	9.75	9.86	9.96	А
Module efficiency		17.2	17.4	17.7	18.0	18.3	%

4 mm<sup>2</sup> (0.16 inches) Cable

length 1,000 mm (39,37 inches),

935.00

500.00 999.00

249.50

Rear view

connector MC4 intermateable

Reduction in the module efficiency rating from 1,000 W/m $^2$  to 200 W/m $^2$ : < 4%. The electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m $^2$  with light spectrum AM 1.5, with cell temperature 25 °C. Measurement tolerance of  $P_{MAX}$  at STC: ±3%. Accuracy of other electrical data:

Electrical data (NOCT)	WSP-285M6	WSP-290M6	WSP-295M6	WSP-300M6	WSP-305M6	
Nominal performance P <sub>MAX</sub>	211	214	218	222	226	Wp
Voltage at maximum $V_{MP}$ performance	29.0	29.3	29.7	30.1	30.4	V
Current at maximum $I_{MP}$ performance	7.27	7.31	7.35	7.4	7.44	А
Open circuit voltage V <sub>oc</sub>	35.4	35.6	35.7	35.9	36.1	V
Short circuit current I <sub>SC</sub>	7.66	7.74	7.82	7.91	7.99	А

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.

### Good to know

WSP series



This frame variant, produced fully from aluminium, guarantees the maximum in stability and protection against material fatigue. The rounded corner elements provide for greater torsional stiffness and waterproofing in the critical corner areas where the material is at its weakest. In contrast to corner connections with mitred cuts or threaded connections, WINAICO corner elements guarantee the best possible transfer of tension between the individual frame sections.

