





REC ALPHO PURE SERIES PRODUCT SPECIFICATIONS

COMPACT PANEL SIZE







EXPERIENCE OCC PERFORMANCE

# SOLAR'S MOST TRUSTED

# REC ALPHA PURE SERIES

PRODUCT SPECIFICATIONS

GENERAL DATA		
Cell type:	132 half-cut REC heterojunction bifacial cells with lead-free, gapless technology, 6 strings of 22 cells in series	
Glass:	$0.13 \text{ in} (3.2  \text{mm}) \text{ solar glass with anti-reflective surface treatment} \\ \text{ in accordance with EN12150} \\$	
Backsheet:	Highly resistant polymer (black)	
Frame:	Anodized aluminum (black)	
Junction box:	3-part, 3 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790	
Connectors:	Stäubli MC4 PV-KBT4/KST4 (4 mm²) in accordance with IEC 62852, IP68 only when connected	
Cable:	12 AWG (4 mm²) PV wire, 43+ 47 in (1.1 + 1.2 m) in accordance with EN 50618	
Dimensions:	$71.7 \times 40 \times 1.2 \text{ in } (19.91 \text{ ft}^2) / 1821 \times 1016 \times 30 \text{ mm} (1.85 \text{ m}^2)$	
Weight:	45 lbs (20.5 kg)	
Origin:	Made in Singapore	

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NMOT

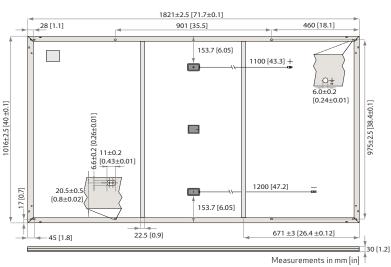
ELECTRICAL DATA	Product Code*: RECxxxAA Pure						
Power Output - P <sub>MAX</sub> (Wp)	380	385	390	395	400	405	410
Watt Class Sorting - (W)	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Nominal Power Voltage - $V_{_{MPP}}(V)$	40.9	41.2	41.5	41.8	42.1	42.4	42.7
Nominal Power Current - $I_{_{MPP}}(A)$	9.30	9.35	9.40	9.45	9.51	9.56	9.61
Open Circuit Voltage - V <sub>oc</sub> (V)	48.4	48.5	48.6	48.7	48.8	48.9	49.0
Short Circuit Current - I <sub>sc</sub> (A)	10.17	10.18	10.22	10.25	10.28	10.30	10.35
Power Density (W/ft²)	19.1	19.3	19.6	19.8	20.1	20.3	20.6
Panel Efficiency (%)	20.5	20.8	21.1	21.4	21.6	21.9	22.2
Power Output - P <sub>MAX</sub> (Wp)	290	293	297	301	305	309	312
Nominal Power Voltage - V <sub>MPP</sub> (V)	38.5	38.8	39.1	39.4	39.7	40.0	40.2
Nominal Power Current - I <sub>MPP</sub> (A)	7.51	7.55	7.59	7.63	7.68	7.72	7.76
Open Circuit Voltage - V <sub>oc</sub> (V)	45.6	45.7	45.8	45.9	46.0	46.1	46.2
Short Circuit Current - I <sub>sc</sub> (A)	8.12	8.16	8.20	8.24	8.28	8.32	8.36

Values at standard test conditions (STC: air mass AM 1.5, irradiance 10.75 W/sq ft (1000 W/m<sup>2</sup>), temperature 77°F (25°C), based on a production spread with a tolerance of  $P_{MWW}$  /  $_{OC}$  & I<sub>SC</sub> ± 3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m<sup>2</sup>, temperature 68°F (20°C), windspeed 3.3 ft/s (1 m/s), \*Where xxx indicates the nominal power class ( $P_{MWW}$ ) at STC above.

MAXIMUM RATINGS	
Operational temperature:	-40+85°C
Maximum system voltage:	1000 V
Maximum test load (front):	+ 7000 Pa (146 lbs/ft²)*
Maximum test load (rear):	- 4000 Pa (83.5 lbs/ft²)*
Max series fuse rating:	25 A
Max reverse current:	25 A

\* See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

WARRANTY			
	Standard	REC	ProTrust
Installed by an REC Certified Solar Professional	No	Yes	Yes
System Size	All	≤25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%
See warranty documents for details. Conditions apply			



#### CERTIFICATIONS IEC 61215:2016, IEC 61730:2016, UL 61730 IEC 62804 PID IEC 61701 Salt Mist IEC 62716 Ammonia Resistance UL 61730 Fire Type Class 2 IEC 62782 Dynamic Mechanical Load IEC 61215-2:2016 Hailstone (35mm) Lead-free acc. to RoHS EU 863/2015 IEC 62321 ISO 14001, ISO 9001, IEC 45001, IEC 62941



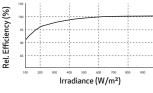
TEMPERATURE RATINGS*		
Nominal Module Operating Temperature:	44°C (±2°C)	
Temperature coefficient of $P_{_{MAX}}$ :	-0.26 %/°C	
Temperature coefficient of ${\rm V}_{\rm oc}$ :	-0.24 %/°C	
Temperature coefficient of I <sub>sc</sub> :	0.04 %/°C	
<sup>*</sup> The temperature coefficients stated are linear values		

## **DELIVERY INFORMATION**

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	792 (24 pallets)
Panels per 53 ft truck:	891 (27 pallets)

### LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:





Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

