

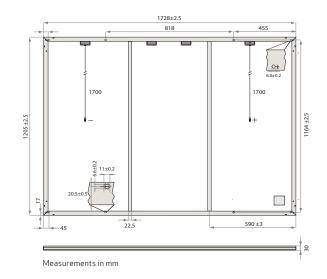


REC ALPHA PURE-RX SERIES

PRODUCT SPECIFICATIONS



GENERAL DATA				
Cell type:	88 half-cut REC heterojunction cells with lead-free, gapless technology			
Glass:	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN12150			
Backsheet:	Highly resistant polymer			
Frame:	Anodized aluminum (black)			
Junction box:	4-part, 4 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790			
Connectors:	$St\"{a}ubli\ MC4\ PV-KBT4/KST4\ (4\ mm^2)$ in accordance with IEC 62852, IP68 only when connected			
Cable:	4 mm² solar cable, 1.7 + 1.7 m in accordance with EN 50618			
Dimensions:	$1728 \times 1205 \times 30 \text{ mm} (2.08 \text{ m}^2)$			
Weight:	23.2 kg			
Origin:	Made in Singapore			



	ELECTRICAL DATA	Produ	ct Code*: RECxxxAA Pu	ıre-RX
	Power Output - P _{MAX} (Wp)	450	460	470
	Watt Class Sorting - (W)	0/+10	0/+10	0/+10
	Nominal Power Voltage - $V_{MPP}(V)$	54.3	54.9	55.4
ر	Nominal Power Current - I_{MPP} (A)	8.29	8.38	8.49
7	Open Circuit Voltage - V _{OC} (V)	65.1	65.3	65.6
	Short Circuit Current - I_{SC} (A)	8.81	8.88	8.95
	Power Density (W/m²)	216	221	226
	Panel Efficiency (%)	21.6	22.1	22.6
	Power Output - P _{MAX} (Wp)	343	350	358
	Nominal Power Voltage - $V_{MPP}(V)$	51.2	51.7	52.2
	Nominal Power Current - I_{MPP} (A)	6.70	6.77	6.86
Z	Open Circuit Voltage - V _{OC} (V)	61.3	61.6	61.8
	Short Circuit Current - I _{SC} (A)	7.11	7.17	7.23

Values at standard test conditions (STC: air mass AM 1.5, irradiance $1000 \, \text{W/m}^2$, temperature 25°C), based on a production spread with a tolerance of P_{MAX} , $V_{\text{C}} \approx 1_{\text{Sc}} \pm 3\%$ within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance $800 \, \text{W/m}^2$, temperature 20°C , windspeed 1 m/s).* Where xxx indicates the nominal power class (P_{Max}) at STC above.

MAXIMUM RATINGS	
Operational temperature:	-40+85°C
Maximum system voltage:	1000 V
Maximum test load (front):	+7000 Pa (713 kg/m²)*
Maximum test load (rear):	- 4000 Pa (407 kg/m²)*
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	l No	Yes	Yes
System Size	All	≤25 kW	25-500 kV
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%
The REC ProTrust Warranty i	s only availa	hle on nan	els nurchase

The REC ProTrust Warranty is only available on panels purchased through an REC Certified Solar Professional installer. Warranty conditions apply. See www.recgroup.com for more details.

		AΤΙ	

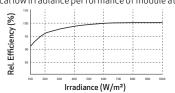
IEC 61215:2016, IEC	61730:2016, UL 61730
IEC 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
ISO 11925-2	Ignitability (EN 13501-1 Class E)
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
IEC 62321	Lead-free acc. to RoHS EU 863/2015
IEC 61730-2:2016	Fire Class C (as per UL 790)
10014001 100 0001	IEC 4E001 IEC 62041



TEMPERATURE RATINGS*		
NominalModuleOperatingTemperature:	44°C (±2°C)	
Temperature coefficient of P_{MAX} :	-0.24 %/°C	
Temperature coefficient of $V_{\rm oc}$:	-0.24 %/°C	
Temperature coefficient of I_{SC} :	0.04 %/°C	
*The temperature coefficients stated are linear values		

DELIVERY INFORMATION	
Panels per pallet:	33
Panels per 40 ft GP/high cube container:	594 (18 pallets)
Panels per 13.6 m truck:	660 (20 pallets)

LOW LIGHT BEHAVIOURTypical low irradiance performance of module at STC:



Available from:

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.

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