SOLAR'S MOST TRUSTED



# REC ALPHA® PURE-RX SERIES PRODUCT SPECIFICATIONS

470 WP 226 <sup>W</sup>/M<sup>2</sup>

COMPACT PANEL SIZE

9 A MODULE CURRENT COMPATIBLE WITH MLPE





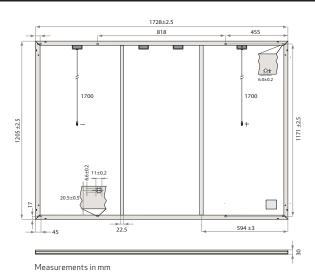


## REC ALPHA PURE-RX SERIES

## PRODUCT SPECIFICATIONS



GENERAL DATA			
Cell type:	88 half-cut REC bifacial, heterojunction cells with lead-free, gapless technology		
Glass:	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN 12150		
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:	Stäubli MC4 PV-KBT4/KST4 (4 mm²) 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:	23.4 kg		
Origin:	Made in Singapore		



ELECTRICAL DATA	Product Code*: RECxxxAA Pure-RX			
Power Output - P <sub>MAX</sub> (Wp)	450	460	470	
Watt Class Sorting - (W)	0/+10	0/+10	0/+10	
Nominal Power Voltage - V <sub>MPP</sub> (V)	54.3	54.9	55.4	
Nominal Power Current - I <sub>MPP</sub> (A)	8.29	8.38	8.49	
Open Circuit Voltage - V <sub>oc</sub> (V)	65.1	65.3	65.6	
Short Circuit Current - I <sub>sc</sub> (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 <sub>MAX</sub> (Wp)	343	350	358	
Nominal Power Voltage - V <sub>MPP</sub> (V)	51.2	51.7	52.2	
Nominal Power Current - I <sub>MPP</sub> (A)	6.70	6.77	6.86	
Open Circuit Voltage - V <sub>oc</sub> (V)	61.3	61.6	61.8	
Short Circuit Current - I <sub>sc</sub> (A)	7.11	7.17	7.23	

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m<sup>2</sup>, temperature 25°C), based on a production spread with a tolerance of  $P_{Max}$  V<sub>oc</sub> & 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 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 m	anual for mounting instruction

STC

NMOT

Available from:

Design load = Test load / 1.5 (safety factor)

WARRANTY				
	Standard	<b>REC</b> 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%	
The REC ProTruct Warranty is only available on panels purchased				

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.

## CERTIFICATIONS

IEC 61215:2021, IEC 6	i1730:2016, 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)
ISO 14001, ISO 9001, I	EC 45001, IEC 62941
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Lead-Fr	take-e-way WEEE-compliant ee recycling scheme

Living Building Challenge Compliant Declare.

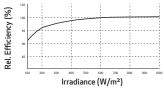
TEMPERATURE RATINGS*			
Nominal Module Operating Temperature:	44°C (±2°C)		
Temperature coefficient of $P_{_{MAX}}$	-0.24 %/°C		
Temperature coefficient of $V_{oc}$ :	-0.24 %/°C		
Temperature coefficient of I <sub>sc</sub> :	0.04 %/°C		
*The temperature coefficients stated are linear values			

### **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 BEHAVIOUR

Typical low irradiance performance of module at STC:



20 Tuas South Ave. 14 Singapore 637312



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.

REC Solar PTE. LTD.

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Specifications subject to change without notice.



## **REC TECHNICAL DOCUMENTATION**

Title:

## Datasheet - REC Alpha Pure-RX

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VER	DATE	REASON FOR ISSUE	SOURCE	PREPARED	APPROVED
1	07.2022	First issue		Alpay	
2	03.2023	Electrical data update due to new layout, size changes, Tcoeff to -0.24%,			
2.1	04.2023	Update to module drawing (4 JB)	Mail from Eddie 14.04.23		
2.2	05.2023	Updates to weight, addition of fire class, mounting hole dimensions, removal of certifications(pending)	Mail from Adeline 30.05.23		
2.3	06.2023	Update to watt classes (460 - 480 Wp)	Mail from Adeline 13.06.23		
3	08.2023	Revision of watt classes to 470 Wp max, specific key visual added	Mail from Cem 02.08.23		
3.1	10.2023	Corrected typo and added Declare statement			
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