

SOLAR'S MOST TRUSTED



REC ALPHA[®] PURE-RX SERIES

PRODUCT SPECIFICATIONS

470 WP

22.6% EFFICIENCY

21.0^W / 50-FT



COMPACT PANEL SIZE

9 A MODULE CURRENT
COMPATIBLE WITH MLPE



ELIGIBLE



LEAD-FREE
ROHS COMPLIANT

EXPERIENCE



PERFORMANCE

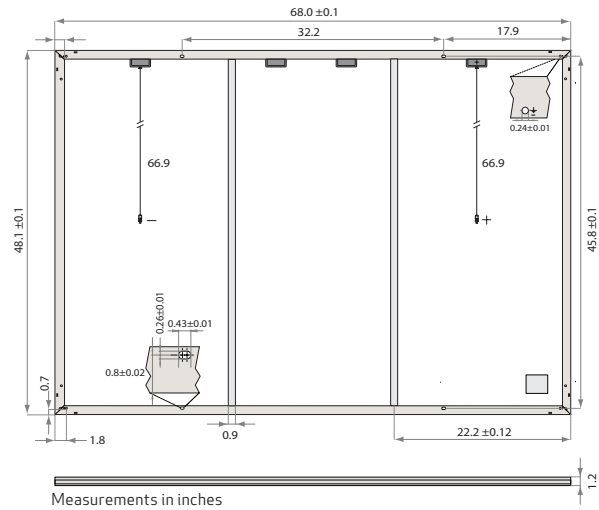


REC ALPHA PURE-RX SERIES

PRODUCT SPECIFICATIONS

GENERAL DATA

Cell type:	88 half-cut REC heterojunction cells with lead-free, gapless technology
Glass:	0.12 in 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 (12 AWG) in accordance with IEC 62852, IP68 only when connected
Cable:	12 AWG solar cable, 66.9 + 66.9 in in accordance with EN 50618
Dimensions:	68.0 x 48.1 x 1.2 in (22.4 sq-ft)
Weight:	51.2 lbs
Origin:	Made in Singapore



ELECTRICAL DATA

Product Code*: RECxxxAA Pure-RX

	450	460	470
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
Nominal Power Current - I_{MPP} (A)	8.29	8.38	8.49
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/sq-ft)	20.1	20.5	21.0
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
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 AM1.5, irradiance 1000 W/m², temperature 77°F (25°C)), based on a production spread with a tolerance of P_{MAX} , V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM1.5, irradiance 800 W/m², temperature 68°F (20°C), windspeed 3.3 ft/s (1 m/s)). * Where xxx indicates the nominal power class (P_{MAX}) at STC above.

MAXIMUM RATINGS

Operational temperature:	-40 ... +185°F
System voltage:	1000 V
Test load (front):	+7000 Pa (146.2 lbs/sq-ft)*
Test load (rear):	-4000 Pa (83.5 lbs/sq-ft)*
Series fuse rating:	25 A
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%

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 61215:2016, 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
UL 61730	Fire Type 2
ISO 14001, ISO 9001, IEC 45001, IEC 62941	



TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P_{MAX} :	-0.24 %/°K
Temperature coefficient of V_{OC} :	-0.24 %/°K
Temperature coefficient of I_{SC} :	0.04 %/°K

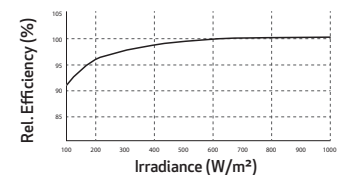
*The temperature coefficients stated are linear values

DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	594 (18 pallets)
Panels per 53 ft truck:	792 (24 pallets)

LOW LIGHT BEHAVIOUR

Typical 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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