SOLAR'S MOST TRUSTED



REC ALPHA® PURE-RX

DATASHEET

450 - 470W HETEROJUNCTION TECHNOLOGY

226 W/M² POWER DENSITY >92% POWER IN YEAR 25 -0.24%/°C TEMPERATURE COEFFICIENT OF PMAX



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GENERAL DATA

Cell Type	88 half-cut bifacial REC heterojunction cells,
	with gapless technology
Glass	3.2 mm solar glass with anti-reflective surface treatment
	in accordance with EN12150
Backsheet	Highly resistant polymer (Black)
Frame	Anodized aluminum (Black)
Junction Box	4-part, 4 bypass diodes,
	IP68 rated, in accordance with IEC 62790:2020
Connectors	Stäubli MC4 PV-KBT4/KST4 (4 mm²)
	in accordance with IEC 62852:2014, IP68 only when connected
Cable	4 mm² solar cable, 1.70 m + 1.70 m
	in accordance with EN50618:2014
Dimensions	1728 x 1205 x 30 mm (2.08 m²)
Weight	22.7 kg
Origin	Made in Singapore

ELECTRICAL DATA	PRO	DUCT CODE*: RECXXXAA PURE	-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
Nominal Power Current - I _{MPP} (A)	8.29	8.38	8.49
Open Circuit Voltage - $V_{oc}(V)$	65.6	65.8	65.9
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} (W _P)	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 - $V_{oc}(V)$	61.8	62.0	62.1

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 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 AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s). *Where xxx indicates the nominal power class (P_{MAX}) at STC above.

I_{sc} 0.04%/°C

*The temperature coefficients stated are linear values

+7000 Pa (714 Kg/m²)

-4000 Pa (408 Kg/m²)

+8000 Pa (816 Kg/m²)

-6000 Pa (612 Kg/m²)

MAXIMUM TEST LOAD*

Design load = Test load / 1.5 (safety factor)

*IEC61730/UL61730 certified. Refer to installation manual. **Internal testing. Refer to installation manual.

Front (4-Point)*

Rear (4-Point)*

Front (6-Point)**

Rear (6-Point)**

TEMPERATURE COEFFICIENTS*

P_{MAX} -0.24%/°C

STC

NMOT

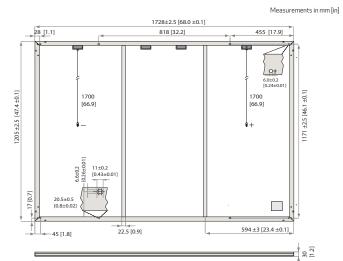
MODULE RATINGS	
Module Operating Temperature [T98]§	70°C
Min Environmental Temperature	-40°C
Nominal Module Operating Temperature	44 ± 2°C
Max Hail Rating [_]	45 mm @ 30.5 m/s
System Voltage	1000 V
Max Series Fuse Rating	25 A
Max Reverse Current	25 A
§ 98th perc	entile operating temperature

V_{oc} -0.24%/°C

98th percentile operating temperature "Based on third party testing

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.



CERT	IFI	CA	TI	٥N	IS
150140	n∩1.	ISO	an	∩1.	IE

ISO 14001; ISO 9001	l; IEC45001; IEC62941
IEC 61215:2021;IEC	61730:2023;UL 61730
ISO 11925-2	Ignitability (EN 13501-1 Class E)
IEC 62716	Ammonia Resistance
IEC 61701	Salt Mist (SM6)
IEC 61215:2016	Hailstone (35 mm)
UL 61730	Fire Type 2
	. 🛆



Annual Degradation



0.25%

WARRANTY **REC** ProTrust Standard Installed by an REC No Yes Yes Certified Professional 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%

 Power in Year 25
 92%
 92%

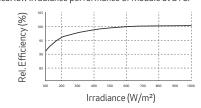
 REC ProTrust Warranty applies only for i) REC panels installed by an REC Certified Solar Professional, and ii) panels have been registered by the installer with REC. Subject to System Size and further conditions. See www.recgroup.com for details.

0.25%

0.25%

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:



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