

REC ALPHA® PURE-RX SERIES



440-470 W_P

HETEROJUNCTION TECHNOLOGY

226 W/M² POWER DENSITY

92% MIN. POWER IN YEAR 25

-0.24%/°C TEMP. COEFF. P_{MAX}

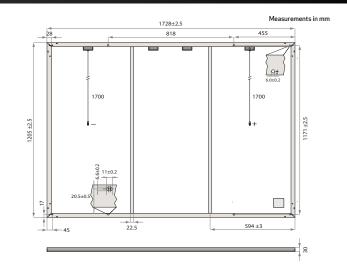


REC ALPHA® PURE-RX SERIES

DATASHEET



GENERAL DATA	
Cell Type	88 half-cut bifacial REC heterojunction cells, with gapless technology
Glass	$3.2\text{mm}\text{solar glass with anti-reflective surface treatment}\\in\text{accordance with EN12150}$
Backsheet	Highly resistant polymer (Black)
Frame	Anodized aluminum (Black)
Junction Box	4-part, 4 bypass diodes IP68 rated, in accordance with IEC 62790
Connectors	$St\"{a}ubli\ MC4\ PV-KBT4/KST4 \ (4\ mm^2)$ in accordance with IEC 62852, IP68 only when connected
Cable	4mm^2 solar cable, $1.7\text{m} + 1.7\text{m}$ in accordance with EN50618
Dimensions	$1728 \times 1205 \times 30 \text{ mm} (2.08 \text{ m}^2)$
Weight	22.7 kg
Origin	Made in Singapore



ELECTRICAL DATA	PRODUCT CODE*: RECxxxAA Pure-RX			
Power Output - P _{MAX} (W _P)	440	450	460	470
Watt Class Sorting - (W)	0/+10W	0/+10W	0/+10W	0/+10W
Nominal Power Voltage - V _{MPP} (V)	53.7	54.3	54.9	55.4
Nominal Power Current - I _{MPP} (A)	8.20	8.29	8.38	8.49
Open Circuit Voltage - V _{oc} (V)	65.4	65.6	65.8	65.9
Short Circuit Current - I _{SC} (A)	8.74	8.81	8.88	8.95
Power Density (W/m²)	211	216	221	226
Panel Efficiency (%)	21.1	21.6	22.1	22.6
Power Output - P _{MAX} (W _P)	335	343	350	358
Nominal Power Voltage - V _{MPP} (V)	50.6	51.2	51.7	52.2
Nominal Power Current - I _{MPP} (A)	6.62	6.70	6.77	6.86
Open Circuit Voltage - V _{oc} (V)	61.6	61.8	62.0	62.1
Short Circuit Current - I _{sc} (A)	7.06	7.11	7.17	7.23

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 PMAX, VOC & ISC $\pm 3\%$ 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.

MAXIMUM RATINGS*	
Operational Temperature	-40 °C - 85 °C
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

Available from:

* See installation manual for mounting instructions.

Design load = Test load / 1.5 (safety factor)

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 _{cc}	0.04%/°C

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)

*The temperature coefficients stated are linear values

CERTIFICATIONS

IEC 61215:2021; IEC61730:2016; UL61730 Ignitability (EN 13501-1 Class E) ISO 11925-2 IEC 62716 Ammonia Resistance (Optional) IEC 61701 Salt Mist-SM6 (Optional) IEC 61215:2016 Hailstone (35 mm) ISO 14001; ISO9001; IEC45001; IEC62941



WARRANTY

Power in Year 25









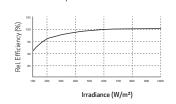
Take-e-way WEEE

	Standard	REC ProTrust	
Installed by an REC Certified 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%

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.

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



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92%

92%

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.