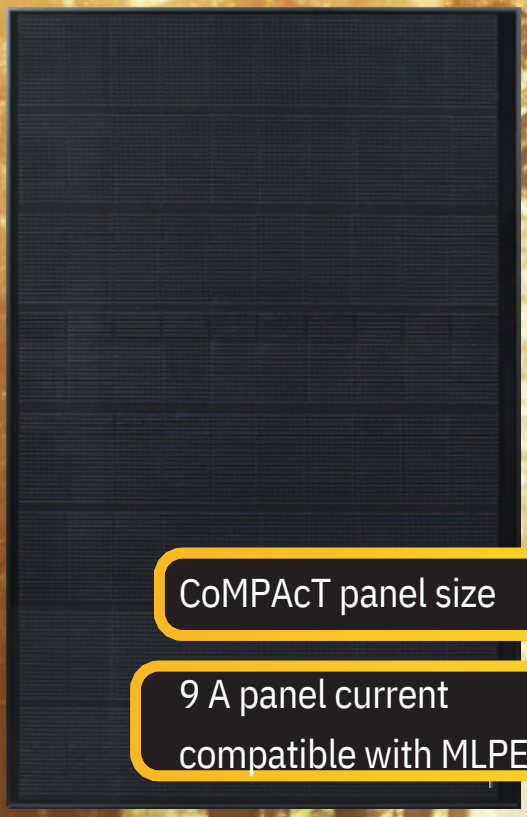
INFO GROUP GLOBAL ENERGY

REC Alpha Pure-R Series

product specifications



CoMPAcT panel size

9 A panel current compatible with MLPE

430wp

223 w/m²

PRODUCT REC 25 YEAR ProTrust WARRANTY PERFORMANCE LABOR

ELIGIBLE

lead free

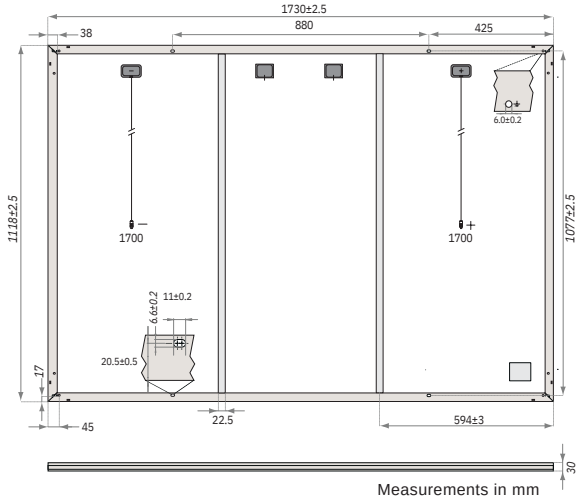
rohS compliant

EXPERIENCE α PERFORMANCE

REC Alpha PURE-R Series
Product SPECIFICATIONS

GENERAL DATA

Cell type:	80 half-cut REC 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 (black)
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
Dimensions:	in accordance with EN 50618 1730 x 1118 x 30 mm (1.93 m2)
Weight:	21.5 kg
Origin:	Made in Singapore



Measurements in mm

ELECTRICAL DATA — Product Code*: RECxxxAA Pure-R

STC				
Power Output - P_{MAX} (Wp)	400	410	420	430
Watt Class Sorting - (W)	0/+10	0/+10	0/+10	0/+10
Nominal Power Voltage - V_{MPP} (V)	48.8	49.4	50.0	50.5
Nominal Power Current - I_{MPP} (A)	8.20	8.30	8.40	8.52
Open Circuit Voltage - V_{OC} (V)	58.9	59.2	59.4	59.7
Short Circuit Current - I_{SC} (A)	8.73	8.81	8.89	8.97
Power Density (W/m²)	207	212	218	223
Panel Efficiency (%)	20.7	21.2	21.8	22.3
NMOT				
Power Output - P_{MAX} (Wp)	305	312	320	327
Nominal Power Voltage - V_{MPP} (V)	46.0	46.6	47.1	47.6
Nominal Power Current - I_{MPP} (A)	6.64	6.70	6.78	6.88
Open Circuit Voltage - V_{OC} (V)	55.5	55.8	56.0	56.3
Short Circuit Current - I_{SC} (A)	7.05	7.12	7.18	7.24

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.

CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 61730
IEC 62804PID
IEC 61701 Salt Mist
IEC 62716Ammonia Resistance
ISO 11925-2Ignitability (EN 13501-1 Class E)
IEC 62782 Dynamic Mechanical Load
IEC 61215-2:2016Hailstone (35mm)
IEC 62321Lead-free acc. to RoHS EU 863/2015 ISO 14001, ISO 9001, IEC 45001, IEC 62941

Intertek · Lead-Free · take-e-way for an easy way compliant scheme · WEEE-recycling

TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of Pmax:	-0.26 %/°C
Temperature coefficient of Voc:	-0.24 %/°C
Temperature coefficient of Isc:	0.04 %/°C

The temperature coefficients stated are linear values

MAXIMUM RATINGS

Operational temperature:		-40 ... +85°C
System voltage:		1000 V
Test load (front):		+ 7000 Pa (713 kg/m²)*
Test load (rear):		- 4000 Pa (407 kg/m²)*
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
System Size	All	≤25 kW25-500 kW
Product Warranty (yrs)	20	25
Power Warranty (yrs)	25	25
Labor Warranty (yrs)	0	10
Power in Year 1	98%	98%
Annual Degradation	0.25%	0.25%
Power in Year 25	92%	92%

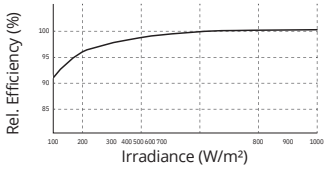
See warranty documents for details. Conditions apply

DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container	858 (26 pallets)

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



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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