REC

SOLAR'S MOST TRUSTED

2026 · CELEBRATING 30 YEARS OF EXCELLENCE

REC ALPHA® PURE-RX

DATASHEET

OUR STRONGEST PANEL

45 MM HAIL RESISTANT

+7000 PA / -4000 PA
WITH 4 POINT CLAMPING

+10000 PA / -6000 PA
WITH 6 POINT CLAMPING

450 - 470W
HETEROJUNCTION TECHNOLOGY

226 W/M²	POWER DENSITY
>92%	POWER IN YEAR 25
-0.24%/°C	TEMPERATURE COEFFICIENT OF P_{MAX}

PRODUCT · REC 25 YEAR ProTrust WARRANTY · PERFORMANCE · LABOR

ELIGIBLE

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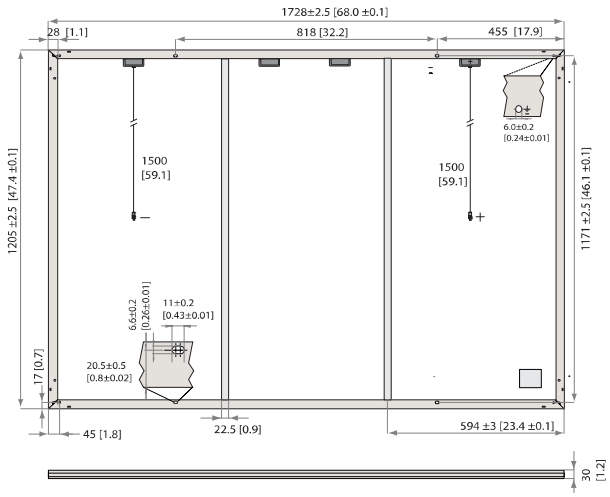
GENERAL DATA

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, 1.50 m + 1.50 m in accordance with EN50618:2014
Dimensions	1728 x 1205 x 30 mm (2.08 m²)
Weight	22.7 kg
Origin	Made in Singapore

Measurements in mm [in]



Specifications subject to change without notice.

ELECTRICAL DATA

PRODUCT CODE*: RECxxxAA Pure-RX

STC			
Power Output - P_{MAX} (W_p)	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	65.7	65.7
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
NMOT			
Power Output - P_{MAX} (W_p)	342	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	61.9	61.9
Short Circuit Current - I_{SC} (A)	7.12	7.18	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 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.

TEMPERATURE COEFFICIENTS*

P_{MAX} -0.24%/°C V_{OC} -0.24%/°C I_{SC} 0.04%/°C

*The temperature coefficients stated are linear values

MODULE RATINGS

Module Operating Temperature [T98]§§	80°C
Min Environmental Temperature	-40°C
Nominal Module Operating Temperature	44 ± 2°C
Max Hail Rating□	45 mm @ 30.7 m/s
System Voltage	1000 V
Max Series Fuse Rating	25 A
Max Reverse Current	25 A

§ 98th percentile operating temperature
□Based on third party testing

MAXIMUM TEST LOAD*

Front (4-Point)*	+7000 Pa (714 Kg/m²)
Rear (4-Point)*	-4000 Pa (408 Kg/m²)
Front (6-Point)**	+10000 Pa (1,020 Kg/m²)
Rear (6-Point)**	-6000 Pa (612 Kg/m²)

Design load = Test load / 1.5 (safety factor)

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

CERTIFICATIONS

ISO 14001; ISO9001; IEC45001; IEC62941	
IEC 61215:2021;IEC 61730:2023;UL 61730	
IEC 61730	Fire Class C
ISO 11925-2	Ignitability (EN 13501-1 Class E)
IEC 62716	Ammonia Resistance
IEC 61701	Salt Mist (SM6)
IEC 61215:2021	Hailstone (35 mm)
UL 61730	Fire Type 2
IEC TS 63126	Level 1

Intertek

take-e-way
for an easy way
Take-e-way WEEE-compliant scheme

WARRANTY

	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%
Power in Year 25	92%	92%	92%

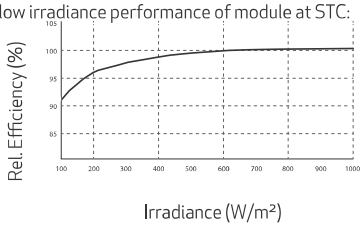
REC ProTrust Warranty applies only for i) REC panels installed by an REC Certified Solar Professional, and ii) panels have been registered by the installer with REC. Subject to System Size and further conditions. See www.recgroup.com for details.

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:



Irradiance (W/m²)

Available from:

BARRES
RENEWABLE ENERGY SYSTEMS
Phone: 01463713131
www.barres.co.uk

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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