EST. '96

REC

SOLAR'S MOST TRUSTED

REC ALPHA® PURE-RX

DATASHEET



PURE STRENGTH

- 55 MM HAIL RESISTANT
- +7000 PA / -4000 PA WITH 4 POINT CLAMPING
- +10000 PA / -6000 PA WITH 6 POINT CLAMPING

450 - 470W HETEROJUNCTION TECHNOLOGY

22.6%	MAX EFFICIENCY
>92%	POWER IN YEAR 25
-0.24%/°C	TEMPERATURE COEFFICIENT OF P_{MAX}

PRODUCT · PERFORMANCE · LABOR

REC 25 YEAR ProTrust WARRANTY

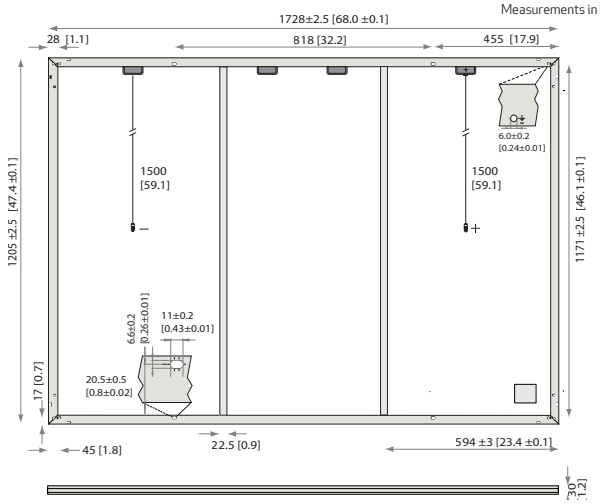
ELIGIBLE

ASSEMBLED WITH FOREIGN AND DOMESTIC COMPONENTS. THESE MODULES ARE COMPATIBLE WITH AVLS INDICATING DOMESTIC CONTENT ADDER ELIGIBILITY

REC ALPHA® PURE-RX
DATASHEET

GENERAL DATA

Cell Type	88 half-cut bifacial REC heterojunction cells, with gapless technology
Glass	0.13 in 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 (12 AWG) in accordance with IEC 62852:2014, IP68 only when connected
Cable	12 AWG solar cable, 59.1 in (1.50 m) + 59.1 in (1.50 m) in accordance with EN50618:2014
Dimensions	68.0 x 47.4 x 1.2 in (22.4 ft²) / 1728 x 1205 x 30 mm (2.08 m²)
Weight	50.0 lb / 22.7 kg
Origin	Made in Singapore



Specifications subject to change without notice.

ELECTRICAL DATA

PRODUCT CODE*: RECXXXAA PURE-RX-DC

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/ft²)	21.6	22.1	22.6
	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 COEFFICIENT*

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]§	176°F (80°C)
Min Environmental Temperature	-40°F (-40°C)
Nominal Module Operating Temperature	44 ± 2°C
Max Hail Rating¤	55 mm @ 33.9 m/s
System Voltage	1000 V
Max Series Fuse Rating	25 A
Max Reverse Current	25 A

§ 98th percentile operating temperature
¤Kiwa PVEL HSS test result

MAXIMUM TEST LOAD*

Front (4-Point)*	+7000 Pa (146 lbs/ft²)
Rear (4-Point)*	-4000 Pa (84 lbs/ft²)
Front (6-Point)**	+10000 Pa (209 lbs/ft²)
Rear (6-Point)**	-6000 Pa (125 lbs/ft²)

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)
EN 13501-5	Roof Fire Performance (BRoof T2)
IEC 62716	Ammonia Resistance
IEC 61701	Salt Mist (SM6)
IEC 61215:2021	Hailstone (35 mm)
UL 61730	Fire Type 2

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%

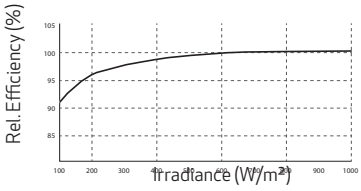
REC ProTrust Warranty applies only for i) REC panels installed by an REC Certified Solar Professional, and ii) panels have been registered by the installer with REC. Subject to System Size and further conditions. See www.recgroup.com for details.

DELIVERY INFORMATION

Panels per Pallet	33
Panels per 40 ft GP/high cube container	594 (18 Pallets)
Panels per 53 ft truck	792 (24 Pallets)

LOW LIGHT BEHAVIOR

Typical low irradiance performance of module at STC:



Founded in Norway in 1996, REC Group is an international pioneering manufacturer of premium solar panels. REC's combination of product quality, company longevity, and dependable warranty help make the brand a leader in solar. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

REC Solar PTE. LTD.
20 Tuas South Ave. 14
Singapore 637312
post@recgroup.com
www.recgroup.com

UL EN 6.2026 V7 REF: PM-DS-12-06/08.04.08.01