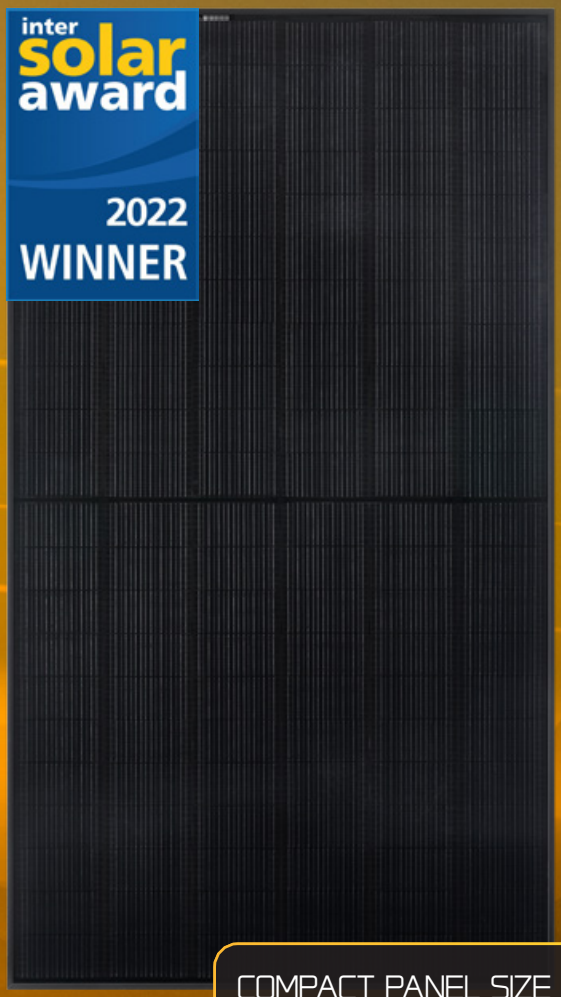
SOLAR'S MOST TRUSTED

REC



REC ALPHA® PURE SERIES

PRODUCT SPECIFICATIONS

COMPACT PANEL SIZE

410 WP

19.3 W/FT²

22.2% EFFICIENCY

PRODUCT
REC
25 YEAR
PROTRUST
WARRANTY
LABOR
PERFORMANCE

ELIGIBLE

LEAD-FREE
ROHS COMPLIANT

EXPERIENCE
α
PERFORMANCE

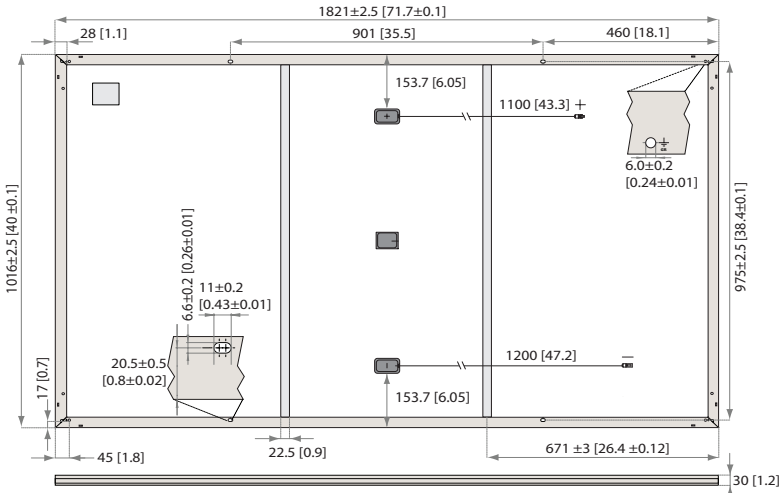
REC ALPHA PURE SERIES

PRODUCT SPECIFICATIONS

REC
SOLAR'S MOST TRUSTED

GENERAL DATA

Cell type:	132 half-cut REC heterojunction bifacial cells with lead-free, gapless technology, 6 strings of 22 cells in series
Glass:	0.13 in (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:	3-part, 3 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:	12 AWG (4 mm²) PV wire, 43+ 47 in (1.1 + 1.2 m) in accordance with EN 50618
Dimensions:	71.7 x 40 x 1.2 in (19.91 ft²) / 1821 x 1016 x 30 mm (1.85 m²)
Weight:	45 lbs (20.5 kg)
Origin:	Made in Singapore



Measurements in mm [in]

ELECTRICAL DATA — Product Code*: RECxxxAA Pure

STC					
Power Output - P_{MAX} (Wp)	390	395	400	405	410
Watt Class Sorting - (W)	0/+5	0/+5	0/+5	0/+5	0/+5
Nominal Power Voltage - V_{MPP} (V)	40.6	41.0	41.4	41.8	42.2
Nominal Power Current - I_{MPP} (A)	9.61	9.64	9.67	9.69	9.72
Open Circuit Voltage - V_{OC} (V)	48.4	48.6	48.8	49.1	49.4
Short Circuit Current - I_{SC} (A)	10.38	10.39	10.40	10.41	10.42
Power Density (W/ft²)	19.6	19.8	20.1	20.3	20.6
Panel Efficiency (%)	21.1	21.4	21.6	21.9	22.2
NMOT					
Power Output - P_{MAX} (Wp)	297	301	305	308	312
Nominal Power Voltage - V_{MPP} (V)	38.3	38.6	39.0	39.4	39.8
Nominal Power Current - I_{MPP} (A)	7.77	7.79	7.82	7.83	7.85
Open Circuit Voltage - V_{OC} (V)	45.6	45.8	46.0	46.3	46.6
Short Circuit Current - I_{SC} (A)	8.38	8.39	8.40	8.41	8.42

Values at standard test conditions (STC: air mass AM 1.5, irradiance 10.75 W/sq ft (1000 W/m²), temperature 77°F (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 68°F (20°C), windspeed 3.3 ft/s (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 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
UL 61730	Fire Type 2
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
IEC 62321	Lead-free acc. to RoHS EU 863/2015
ISO 14001, ISO 9001, IEC 45001, IEC 62941	

Intertek Lead-Free

TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P_{MAX}:	-0.24 %/°K
Temperature coefficient of V_{OC}:	-0.24 %/°K
Temperature coefficient of I_{SC}:	0.04 %/°K

*The temperature coefficients stated are linear values

MAXIMUM RATINGS

Operational temperature:	-40 ... +185°F
Maximum system voltage:	1000 V
Maximum test load (front):	+7000 Pa (146 lbs/ft²)*
Maximum test load (rear):	-4000 Pa (83.5 lbs/ft²)*
Max series fuse rating:	25 A
Max 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	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%

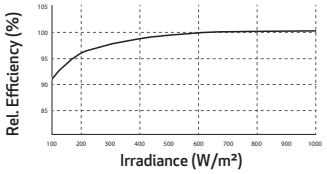
The REC ProTrust Warranty is only available on panels purchased through an REC Certified Solar Professional installer. Warranty conditions apply. See www.recgroup.com for more details.

DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	792 (24 pallets)
Panels per 53 ft truck:	891 (27 pallets)

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



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.

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