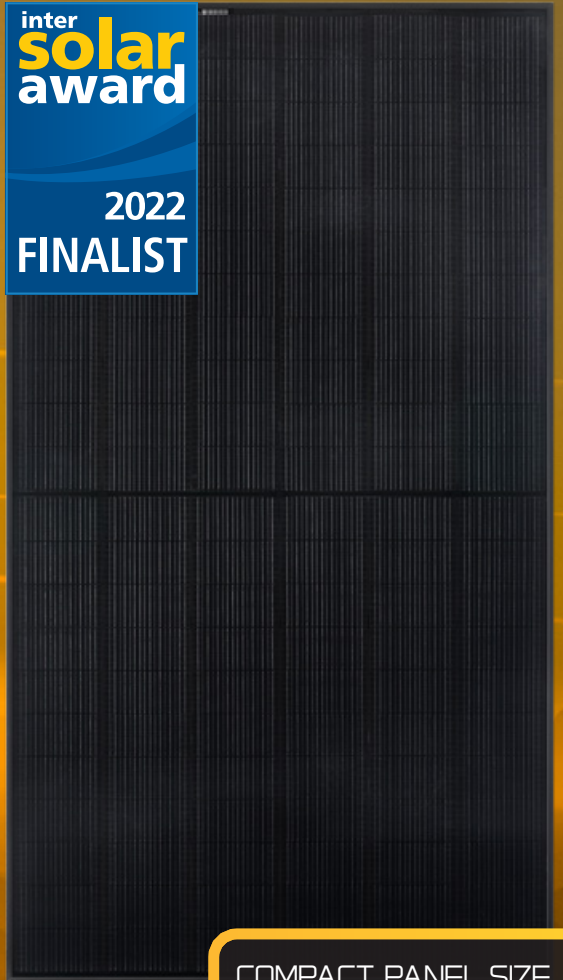


SOLAR'S MOST TRUSTED



inter  
**solar**  
award

2022  
FINALIST



COMPACT PANEL SIZE

# REC ALPHA<sup>®</sup> PURE SERIES

PRODUCT SPECIFICATIONS

410 WP  
222 W/M<sup>2</sup>



ELIGIBLE



LEAD-FREE  
ROHS COMPLIANT

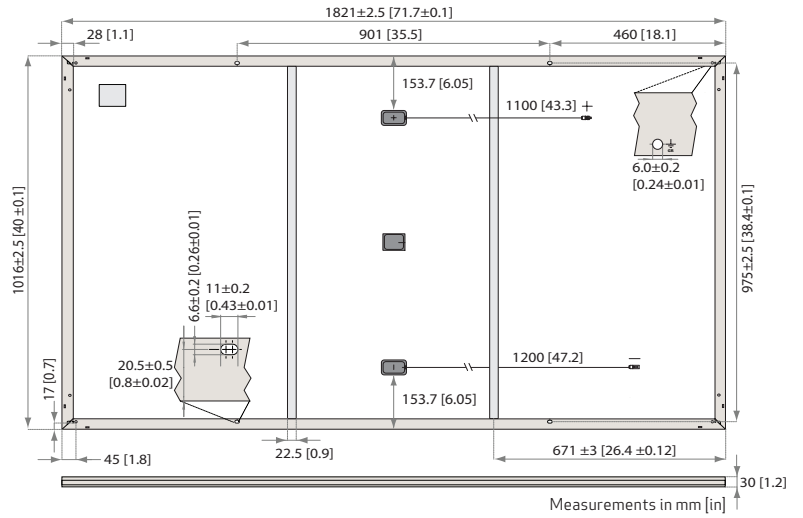
EXPERIENCE  
**α**  
PERFORMANCE

# REC ALPHA PURE SERIES

## PRODUCT SPECIFICATIONS

### GENERAL DATA

Cell type:	132 half-cut REC heterojunction cells with lead-free, gapless technology, 6 strings of 22 cells in series
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:	3-part, 3 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors:	Stäubli MC4 PV-KBT4/KST4 (4 mm <sup>2</sup> ) in accordance with IEC 62852, IP68 only when connected
Cable:	4 mm <sup>2</sup> solar cable, 1.1 m + 1.2 m in accordance with EN 50618
Dimensions:	1821 x 1016 x 30 mm (1.85 m <sup>2</sup> )
Weight:	20.5 kg
Origin:	Made in Singapore



### ELECTRICAL DATA

#### Product Code\*: RECxxxAA Pure

	385	390	395	400	405	410
Power Output - P <sub>MAX</sub> (Wp)	385	390	395	400	405	410
Watt Class Sorting - (W)	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Nominal Power Voltage - V <sub>MPP</sub> (V)	41.2	41.5	41.8	42.1	42.4	42.7
Nominal Power Current - I <sub>MPP</sub> (A)	9.35	9.40	9.45	9.51	9.56	9.61
Open Circuit Voltage - V <sub>OC</sub> (V)	48.5	48.6	48.7	48.8	48.9	49.0
Short Circuit Current - I <sub>SC</sub> (A)	10.18	10.22	10.25	10.28	10.30	10.35
Power Density (W/m <sup>2</sup> )	208	211	214	216	219	222
Panel Efficiency (%)	20.8	21.1	21.4	21.6	21.9	22.2

	293	297	301	305	309	312
Power Output - P <sub>MAX</sub> (Wp)	293	297	301	305	309	312
Nominal Power Voltage - V <sub>MPP</sub> (V)	38.8	39.1	39.4	39.7	40.0	40.2
Nominal Power Current - I <sub>MPP</sub> (A)	7.55	7.59	7.63	7.68	7.72	7.76
Open Circuit Voltage - V <sub>OC</sub> (V)	45.7	45.8	45.9	46.0	46.1	46.2
Short Circuit Current - I <sub>SC</sub> (A)	8.16	8.20	8.24	8.28	8.32	8.36

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m<sup>2</sup>, temperature 25°C), based on a production spread with a tolerance of P<sub>MAX</sub>, V<sub>OC</sub> & I<sub>SC</sub> ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m<sup>2</sup>, temperature 20°C, windspeed 1 m/s). \* Where xxx indicates the nominal power class (P<sub>MAX</sub>) at STC above.

### MAXIMUM RATINGS

Operational temperature:	-40 ... +85°C
Maximum system voltage:	1000 V
Maximum test load (front):	+ 7000 Pa (713 kg/m <sup>2</sup> )*
Maximum test load (rear):	- 4000 Pa (407 kg/m <sup>2</sup> )*
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%

See warranty documents for details. Conditions apply

### CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 61730	
IEC 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
ISO 11925-2	Ignitability (Class E)
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	



### TEMPERATURE RATINGS\*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P <sub>MAX</sub> :	-0.26 %/°C
Temperature coefficient of V <sub>OC</sub> :	-0.24 %/°C
Temperature coefficient of I <sub>SC</sub> :	0.04 %/°C

\* The temperature coefficients stated are linear values

### DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	792 (24 pallets)
Panels per 13.6 m truck:	924 (28 pallets)
Panels per 53 ft truck:	891 (27 pallets)

### LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:

