SOLAR'S MOST TRUSTED





REC ALPHOONS

PURE SERIES

PRODUCT SPECIFICATIONS



410 WP 222 W/M²

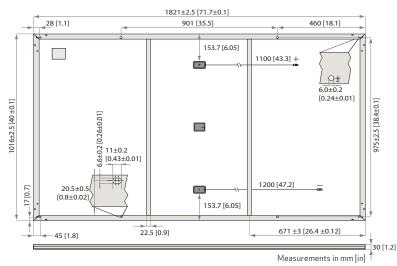








GENERAL DA	ATA
Cell type:	132 half-cut REC heterojunction cells with lead-free, gapless technology, 6 strings of 22 cells in series
Glass:	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN12150
Backsheet:	Highly resistant polymer (black)
Frame:	Anodized aluminum (black)
Junction box:	3-part, 3 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors:	$St\"{a}ubliMC4PV\text{-}KBT4/KST4(4mm^2)$ in accordance with IEC 62852, IP68 only when connected
Cable:	4 mm² solar cable, 1.1 m+1.2 m in accordance with EN50618
Dimensions:	$1821 \times 1016 \times 30 \text{ mm} (1.85 \text{ m}^2)$
Weight:	20.5 kg
Origin:	Made in Singapore



ELECTRICAL DATA	Product Code*: RECxxxAA Pure					
Power Output - P _{MAX} (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 - $V_{MPP}(V)$	41.2	41.5	41.8	42.1	42.4	42.7
Nominal Power Current - I_{MPP} (A)	9.35	9.40	9.45	9.51	9.56	9.61
Open Circuit Voltage - V _{OC} (V)	48.5	48.6	48.7	48.8	48.9	49.0
Short Circuit Current - I_{SC} (A)	10.18	10.22	10.25	10.28	10.30	10.35
Power Density (W/m²)	208	211	214	216	219	222
Panel Efficiency (%)	20.8	21.1	21.4	21.6	21.9	22.2
Power Output - P _{MAX} (Wp)	293	297	301	305	309	312
Nominal Power Voltage - $V_{MPP}(V)$	38.8	39.1	39.4	39.7	40.0	40.2
Nominal Power Current - I _{MPP} (A)	7.55	7.59	7.63	7.68	7.72	7.76
Open Circuit Voltage - $V_{OC}(V)$	45.7	45.8	45.9	46.0	46.1	46.2
Short Circuit Current - I _{SC} (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 $1000 \, \text{W/m}^2$, temperature 25°C), based on a production spread with a tolerance of P_{Max} , $V_{\text{Oc}} \& 1_{\text{Sc}} \pm 3\%$ within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance $800 \, \text{W/m}^2$, temperature 20°C , windspeed 1 m/s).* Where xxx indicates the nominal power class (P_{Max}) at STC above.

MAXIMUM RATINGS			
Operational temperature:	-40+85°C		
Maximum system voltage:	1000 V		
Maximum test load (front):	+7000 Pa (713 kg/m²)*		
Maximum test load (rear):	- 4000 Pa (407 kg/m²)*		
Max series fuse rating:	25 A		
Max reverse current:	25 A		
*See installation manual for mounting instructions.			

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 docu	ments for de	etails. Cor	ditions 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-freeacc.toRoHSEU863/2015			
	ISO 14001, ISO 9001, IE	EC 45001, IEC 62941			









TEMPERATURE RATINGS*				
Nominal Module Operating Temperature:	44°C (±2°C)			
Temperature coefficient of P_{MAX} :	-0.26 %/°C			
Temperature coefficient of $V_{\rm oc}$:	-0.24 %/°C			
Temperature coefficient of I_{SC} :	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:

