

SOLAR'S MOST TRUSTED

REC ALPHOC® PURE BLACK SERIES PRODUCT SPECIFICATIONS







EXPERIENCE



REC ALPHA PURE BLACK SERIES > PRODUCT SPECIFIC

1821±2.5 [71.7±0.1] 28 [1.1] 460 [18.1] 901 [35.5] (+)1100 [43.3] 0± 6.0±0.2 [0.24±0.01] 1016±2.5 [40 ±0.1] 975±2.5 [38.4±0.1] 6.6±0.2 [0.26±0.01] 11±0.2 [0.43±0.01] 20.5±0.5 [0.7] [0.8±0.02] 1200 [47.2] 17 22.5 [0.9] 671 ±3 [26.4 ±0.12] 45 [1.8] 30 [1.2] Measurements in mm [in]

Measurements minin

ELECTRICAL DATA

GENERAL DATA

Celltype:	132 half-cut REC heterojunction cells with lead-free, gapless technology 6 strings of 22 cells in series	Connectors:	Stäubli MC4PV-KBT4/KST4,12AWG(4mm²) in accordance with IEC 62852 IP68 only when connected
Glass:	0.13 in (3.2 mm) solar glass with anti-reflection surface treatment	Cable:	12 AWG (4 mm²) PV wire, 43+ 47 in (1.1+1.2 m) accordance with EN 50618
Backsheet:	Highly resistant polymer (black)	Dimensions:	71.7 x 40 x 1.2 in (1821 x 1016 x 30 mm)
Frame:	Anodized aluminum (black)	Weight:	45 lbs (20.5 kg)
Junction box:	3-part, 3 bypass diodes, IP67 rated in accordance with IEC 62790	Origin:	Made in Singapore

Product Code*: RECxxxAA Pure Black

	Power Output - P _{MAX} (Wp)	385	390	395	400	405
STC	Watt Class Sorting - (W)	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
	Nominal Power Current - I _{MPP} (A)	9.35	9.40	9.45	9.51	9.56
	Open Circuit Voltage - V _{oc} (V)	48.5	48.6	48.7	48.8	48.9
	Short Circuit Current - I _{sc} (A)	9.99	10.03	10.07	10.10	10.14
	Power Density (W/sq ft)	19.3	19.6	19.8	20.1	20.3
NMOT	Panel Efficiency (%)	20.8	21.1	21.3	21.6	21.9
	Power Output - P _{MAX} (Wp)	293	297	301	305	309
	Nominal Power Voltage - V _{MPP} (V)	38.8	39.1	39.4	39.7	40.0
	Nominal Power Current - I _{MPP} (A)	7.55	7.59	7.63	7.68	7.72
	Open Circuit Voltage - V _{oc} (V)	45.7	45.8	45.9	46.0	46.1
	Short Circuit Current - I _{sc} (A)	8.07	8.10	8.13	8.16	8.19
	VII	10 75 14/			(2500)	1.11

Values at standard test conditions (STC: air mass AM1.5, irradiance 10.75 W/sq ft (1000 W/m²), temperature 77°F (25°C), based on a production spread with a tolerance of $P_{MAW} V_{oc} \& I_{sc} \pm 33\%$ within one watt class. Nominal module operating temperature (NMOT: air mass AM1.5, 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_{MAW}) at STC above.

PRODUCT SPECIFICATIONS

CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 61730 (Pending) ISO14001:2004, ISO 9001:2015, OHSAS 18001:2007, IEC 62941



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

MAXIMUM RATINGS

Operational temperature:	-40+185°F (-40+85°C)
Maximum system voltage:	1000 V
Maximum test load (front):	+ 7000 Pa (146 lbs/sq ft)*
Maximum test load (rear):	- 4000 Pa (83.5 lbs/sq ft)*
Max series fuse rating:	25 A
Max reverse current:	25 A
* See installatio	n manual for mounting instructions.

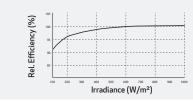
Design load = Test load / 1.5 (safety factor)

TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)	
Temperature coefficient of P _{MAX} :	-0.26 %/°C	
Temperature coefficient of V_{oc} :	-0.24 %/°C	
Temperature coefficient of I _{sc} :	0.04 %/°C	
'The temperature coefficients stated are linear values		

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



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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.

