

SOLAR'S MOST TRUSTED

REC ALPHOC® PURE BLACK SERIES PRODUCT SPECIFICATIONS







EXPERIENCE



45 [1.8]

Measurements in mm [in]

E

Cell type:

Glass:

Frame:

Backsheet:

lunction box

ELECTRICAL DATA

GENERAL DATA

1016±2.5 [40±0.1]

REC ALPHA PURE BLACK SERIES > PRODUCT SPECIFIC

1821±2.5 [71.7±0.1] 460 [18.1] 28 [1.1] 901 [35.5] (+)1100 [43.3] Ο÷ 6.0±0.2 [0.24±0.01] 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]

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

671 ±3 [26.4 ±0.12]

30 [1.2]

Product Code*: RECxxxAA Pure Black

STC	Power Output - P _{MAX} (Wp)	385	390	395	400	405
	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
	Values at standard test conditions (STC) air mass AM15 i	rradiance 10 75 W	/caft/1000.W/m2) tomporatura 7	7ºE (2EºC) bacad	

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_{MWV} V_{GC} & I_{SC} ±3% 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_{MWV}) at STC above.

PRODUCT SPECIFICATIONS

CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 61730 (Pending) ISO 14001:2004, 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 installation manual for mounting instructio			

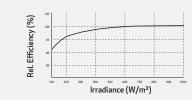
Design load = Test load / 1.5 (safety factor)

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:



Ref: PM-DS-12-01-Rev- A 03.21

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.

