





600-640 W_P

HETEROJUNCTION TECHNOLOGY

22.5% EFFICIENCY
-0.24% /K TEMP. COEFF. P_{MAX}
92% MIN. POWER IN YEAR 25



REC ALPHA® PRO M SERIES

DATASHEET

ELECTRICAL DATA

Nominal Power Current - I_{MPP} (A)

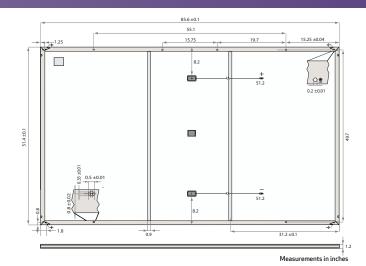
Open Circuit Voltage - V_{oc} (V)

Short Circuit Current - I_{SC} (A)

Available from:



GENERAL DATA	
Cell Type	120 half-cut REC bifacial heterojunction cells
Glass	0.13 in solar glass with anti-reflective surface treatment in accordance with EN12150
Backsheet	Highly resistant polymer (White)
Frame	Anodized aluminum (Silver)
Junction Box	3-part, 3 bypass diodes, IP68 rated, in accordance with IEC 62790
Connectors	Stäubli MC4-EVO2 (12AWG) in accordance with IEC 62852, IP68 only when connected
Cable	12 AWG solar cable, 51.2 in + 51.2 in in accordance with EN50618
Dimensions	$85.6 \times 51.4 \times 1.2 \text{ in (30.6 ft}^2)$
Weight	71.6 lbs
Origin	Made in Singapore



LLLCTRICAL DATA	PRODUCT CODE": RECXXXAA FIO M					CLN
Power Output - P _{MAX} (W _P)	600	610	620	630	640	IEC 6
Watt Class Sorting - (W)	0/+10	0/+10	0/+10	0/+10	0/+10	ISO 1
Nominal Power Voltage - V _{MPP} (V)	36.0	36.3	36.6	36.8	37.1	IEC 6
Nominal Power Current - I _{MPP} (A)	16.67	16.81	16.94	17.12	17.26	IEC 6
Open Circuit Voltage - V _{OC} (V)	44.2	44.3	44.4	44.5	44.6	IEC 6
Short Circuit Current - I _{SC} (A)	17.65	17.72	17.79	17.86	17.93	UL 6
Power Density (W/ft²)	19.6	19.9	20.3	20.6	20.9	ISO 1
Panel Efficiency (%)	21.1	21.5	21.8	22.2	22.5	
Power Output - P _{MAX} (W _P)	457	464	472	480	487	/
Nominal Power Voltage - V _{MPP} (V)	33.9	34.2	34.5	34.7	35.0	

14.31 $Values at standard test conditions (STC: air mass AM1.5, irradiance 1000 W/m^2, temperature 77°F (25°C)), based on a production spread with a tolerance of <math>P_{MAXC}$, 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_{MAXC}) at STC above.

13.58

41.7

13.68

41.8

14 37

-40 °F - 185 °F
1500 V
+5400 Pa (112.6 lb/ft²)
-2400 Pa (50.2 lb/ft²)
35 A
35 A

* See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

13.46

41.7

14.26

TEMPERATURE RATINGS*	
Nominal Module Operating Temperature	44°C±2°C
Temperature coefficient of P_{MAX}	-0.24%/K
Temperature coefficient of $V_{\rm oc}$	-0.24%/K
Temperature coefficient of $\rm I_{SC}$	0.04%/K

13.83

41.9

14.43

13.94

42.0

14 48

*The temperature coefficients stated are linear values

DELIVERY INFORMATION	
Panels per Pallet	33
Panels per 40 ft GP/high cube container	528 (16 Pallets)
Panels per 53 ft truck	594 (18 Pallets)

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.

CERTIFICATIONS 61215:2021; IEC61730:2016; UL61730 11925-2 Ignitability (EN 13501-1 Class E) 62716 Ammonia Resistance 61701 Salt Mist (SM6) 61215:2016 Hailstone (35mm) 61730 Fire Type 1 14001; ISO9001; IEC45001; IEC62941







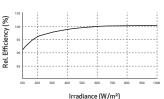


WARRANTY				ŀ
	Standard	REC ProTrust		
Installed by an REC Certified Professional	No	Yes	Yes	
System Size	All	<25 kW	25-500 kW	
Product Warranty (yrs)	20	25	25	
Power Warranty (yrs)	25	25	25	
Labor Warranty (yrs)	0	25	10	
Power in Year 1	98%	98%	98%	
Annual Degradation	0.25%	0.25%	0.25%	
Power in Year 25	92%	92%	92%	

REC ProTrust Warranty applies only for i) REC panels installed by an REC Certified Solar Professional, and ii) panels have been registered by the installer with REC. Subject to System Size and further conditions. See www.recgroup.com for details.

LOW LIGHT BEHAVIOR

Typical low irradiance performance of module at STC:



REC Solar PTE. LTD. 20 Tuas South Ave.14 Singapore 637312 post@recgroup.com www.recgroup.com



Specifications subject to change without notice.

Ref: PM-DS-12-06-Rev-3.2 10.23