

SOLAR'S MOST TRUSTED



REC ALPHA PRO M SERIES

PRODUCT SPECIFICATIONS



640 WP
21.2 W/SQ-FT
22.5% EFFICIENCY



LEAD FREE
ROHS COMPLIANT

EXPERIENCE



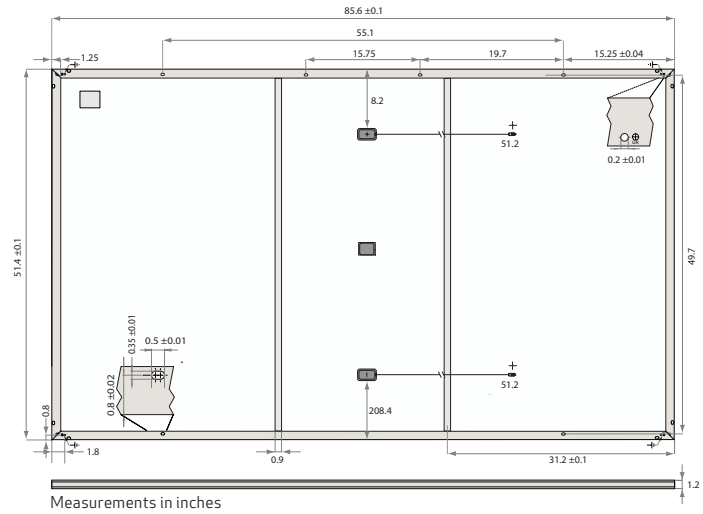
PERFORMANCE

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PRODUCT SPECIFICATIONS

GENERAL DATA

Cell type:	120 half-cut REC heterojunction cells with lead-free, gapless technology
Glass:	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN 12150
Backsheet:	Highly resistant polymer (white)
Frame:	Anodized aluminum (silver)
Junction box:	3-part, 3 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors:	Stäubli MC4-EVO2 (12 AWG) in accordance with IEC 62852, IP68 only when connected
Cable:	12 AWG solar cable, 51.2 + 51.2 in in accordance with EN 50618
Dimensions:	85.6 x 51.4 x 1.2 in (30.14 sq-ft)
Weight:	71.7 lbs
Origin:	Made in Singapore



ELECTRICAL DATA

Product Code*: RECxxxAA Pro M

	620	630	640
Power Output - P _{MAX} (Wp)	620	630	640
Watt Class Sorting - (W)	0/+10	0/+10	0/+10
Nominal Power Voltage - V _{MPP} (V)	36.6	36.8	37.1
Nominal Power Current - I _{MPP} (A)	16.94	17.12	17.26
Open Circuit Voltage - V _{OC} (V)	44.6	44.7	44.9
Short Circuit Current - I _{SC} (A)	17.67	17.78	17.89
Power Density (W/sq-ft)	20.6	20.9	21.2
Panel Efficiency (%)	21.8	22.2	22.5
Power Output - P _{MAX} (Wp)	469	477	485
Nominal Power Voltage - V _{MPP} (V)	34.3	34.5	34.8
Nominal Power Current - I _{MPP} (A)	13.69	13.84	13.95
Open Circuit Voltage - V _{OC} (V)	41.8	41.9	42.1
Short Circuit Current - I _{SC} (A)	14.28	14.37	14.46

Values at standard test conditions (STC: air mass AM1.5, irradiance 1000 W/m², temperature 77°F (25°C)), based on a production spread with a tolerance of P_{MAX}, V_{OC} & 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_{MAX}) at STC above.

MAXIMUM RATINGS

Operational temperature:	-40...+185°F
System voltage:	1500 V
Test load (front):	+5400 Pa (112.8 lbs/sq-ft)*
Test load (rear):	-2400 Pa (50.1 lbs/sq-ft)*
Series fuse rating:	35 A
Reverse current:	35 A

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

WARRANTY

Product Warranty (yrs)	20
Power Warranty (yrs)	25
Power in Year 1	98%
Annual Degradation	0.25%
Power in Year 25	92%

See www.recgroup.com for more details.

CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 61730
 IS 14286:2010
 IS/IEC 61730:2004
 ISO 14001, ISO 9001, IEC 45001, IEC 62941



TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P _{MAX} :	-0.24 %/°K
Temperature coefficient of V _{OC} :	-0.24 %/°K
Temperature coefficient of I _{SC} :	0.04 %/°K

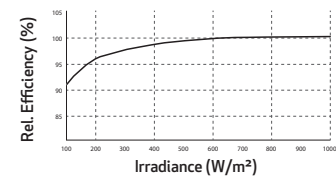
*The temperature coefficients stated are linear values

DELIVERY INFORMATION

Panels per pallet:	33
Panels per 40 ft GP/high cube container:	528 (16 pallets)

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



Available from:

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.

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