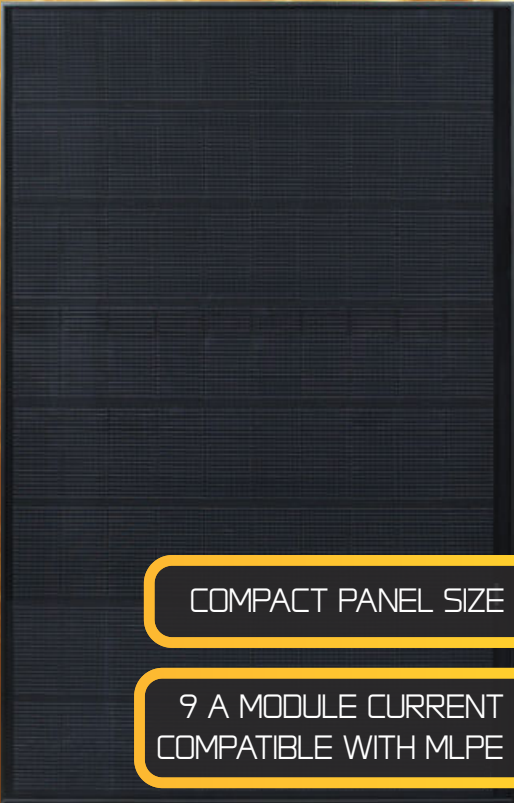


SOLAR'S MOST TRUSTED



REC ALPHA PURE-R SERIES

PRODUCT SPECIFICATIONS



COMPACT PANEL SIZE

9 A MODULE CURRENT
COMPATIBLE WITH MLPE

430 WP
20.7 $\frac{W}{FT^2}$
22.3% EFFICIENCY



LEAD-FREE
ROHS COMPLIANT

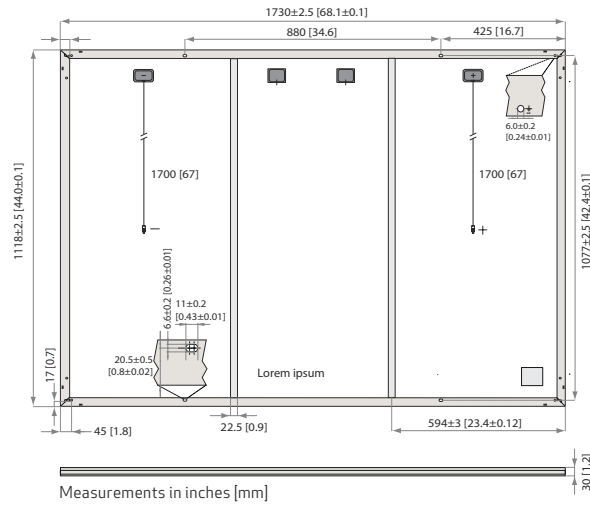
EXPERIENCE
 α
PERFORMANCE

REC ALPHA PURE-R SERIES

PRODUCT SPECIFICATIONS

GENERAL DATA

| | |
|---------------|--|
| Cell type: | 80 half-cut REC bifacial, heterojunction cells with lead-free, gapless technology |
| Glass: | 0.13in(3.2mm)solar glass with anti-reflective surface treatment in accordance with EN12150 |
| Backsheet: | Highly resistant polymer (black) |
| Frame: | Anodized aluminum (black) |
| Junction box: | 4-part, 4 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790 |
| Connectors: | Stäubli MC4 PV-KBT4/KST4 (4 mm ²) in accordance with IEC 62852, IP68 only when connected |
| Cable: | 12 AWG (4 mm ²) PV wire, 67 + 67 in (1.7 + 1.7 m) in accordance with EN 50618 |
| Dimensions: | 68.1 x 44.0 x 1.2 in (20.77 ft ²) / 1730 x 1118 x 30 mm (1.93 m ²) |
| Weight: | 47.4 lbs (21.5 kg) |
| Origin: | Made in Singapore |



ELECTRICAL DATA

Product Code*: RECxxxAA PURE-R

| | 400 | 410 | 420 | 430 |
|--|-------|-------|-------|-------|
| Power Output - P _{MAX} (Wp) | 400 | 410 | 420 | 430 |
| Watt Class Sorting - (W) | 0/+10 | 0/+10 | 0/+10 | 0/+10 |
| Nominal Power Voltage - V _{MPP} (V) | 48.8 | 49.4 | 50.0 | 50.5 |
| Nominal Power Current - I _{MPP} (A) | 8.20 | 8.30 | 8.40 | 8.52 |
| Open Circuit Voltage - V _{OC} (V) | 58.9 | 59.2 | 59.4 | 59.7 |
| Short Circuit Current - I _{SC} (A) | 8.73 | 8.81 | 8.89 | 8.97 |
| Power Density (W/ft ²) | 207 | 212 | 218 | 223 |
| Panel Efficiency (%) | 20.7 | 21.2 | 21.8 | 22.3 |
| Power Output - P _{MAX} (Wp) | 305 | 312 | 320 | 327 |
| Nominal Power Voltage - V _{MPP} (V) | 46.0 | 46.6 | 47.1 | 47.6 |
| Nominal Power Current - I _{MPP} (A) | 6.64 | 6.70 | 6.78 | 6.88 |
| Open Circuit Voltage - V _{OC} (V) | 55.5 | 55.8 | 56.0 | 56.3 |
| Short Circuit Current - I _{SC} (A) | 7.05 | 7.12 | 7.18 | 7.24 |

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_{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 ... +85°C |
| System voltage: | 1000 V |
| Test load (front): | + 7000 Pa (146 lbs/ft ²)* |
| Test load (rear): | - 4000 Pa (83.5 lbs/ft ²)* |
| Series fuse rating: | 25 A |
| Reverse current: | 25 A |

* 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 documents for details. Conditions apply

Available from:

CERTIFICATIONS

| | |
|---|------------------------------------|
| IEC 61215:2016, IEC 61730:2016, UL 61730 | |
| IEC 62804 | PID |
| IEC 61701 | Salt Mist |
| IEC 62716 | Ammonia Resistance |
| UL 61730 | Fire Type Class 2 |
| IEC 62782 | Dynamic Mechanical Load |
| IEC 61215-2:2016 | Hailstone (35mm) |
| IEC 62321 | Lead-free acc. to RoHS EU 863/2015 |
| ISO 14001, ISO 9001, IEC 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 _{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: | 858 (26 pallets) |

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:

