





REC ALPHX SERIES



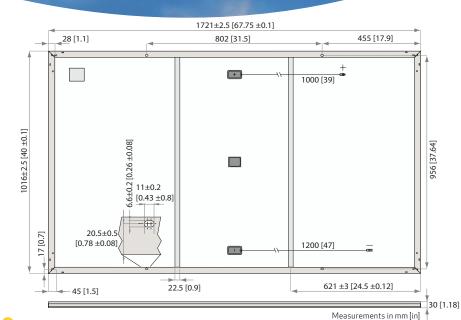
380 WP POWER



EXPERIENCE



REC ALPHA SERIES PRODUCT DATASHEET



| 7 | GEI | NERAL | . Data |
|---|-----|-------|--------|
|---|-----|-------|--------|

STC

NMOT

| Cell type: | 120 half-cut cells with REC heterojunction cell technology 6 strings of 20 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, 39 + 47 in (1 + 1.2 m) accordance with EN 50618 |
| Backsheet: | Highly resistant polymeric construction | Dimensions: | 67.8 x 40 x 1.2 in (1721 x 1016 x 30 mm) 18.8 sq ft (1.75 m²) |
| Frame: | Anodized aluminum (black) | Weight: | 43 lbs (19.5 kg) |
| Junction box | 3-part, 3 bypass diodes, IP67 rated in accordance with IEC 62790 | Origin: | Made in Singapore |

| ELECTRICAL DATA | | | | | | |
|-----------------|--|--|--------|--|--|--|
| | | | | | | |
| _ | | | (1.1.) | | | |

|) | ELECTRICAL DATA | Product Code*: RECxxxAA | | | | |
|---|--|-------------------------|-------|-------|-------|-------|
| | Power Output - P _{MAX} (Wp) | 360 | 365 | 370 | 375 | 380 |
| | Watt Class Sorting - (W) | -0/+5 | -0/+5 | -0/+5 | -0/+5 | -0/+5 |
| | Nominal Power Voltage - V _{MPP} (V) | 36.7 | 37.1 | 37.4 | 37.8 | 38.1 |
| , | Nominal Power Current - I _{MPP} (A) | 9.82 | 9.85 | 9.9 | 9.94 | 9.98 |
|) | Open Circuit Voltage - V _{oc} (V) | 43.9 | 44 | 44.1 | 44.2 | 44.3 |
| | Short Circuit Current - I _{sc} (A) | 10.49 | 10.52 | 10.55 | 10.58 | 10.61 |
| | Power Density (W/sq ft) | 19.15 | 19.41 | 19.68 | 19.94 | 20.21 |
| | Panel Efficiency (%) | 20.6 | 20.9 | 21.2 | 21.4 | 21.7 |
| | Power Output - P _{MAX} (Wp) | 274 | 278 | 282 | 286 | 289 |
| | Nominal Power Voltage - $V_{MPP}(V)$ | 34.6 | 35.0 | 35.2 | 35.6 | 35.9 |
| | Nominal Power Current - I _{MPP} (A) | 7.93 | 7.96 | 8.00 | 8.03 | 8.06 |
| | Open Circuit Voltage - V _{oc} (V) | 41.4 | 41.5 | 41.6 | 41.6 | 41.7 |
| | Short Circuit Current - I _{sc} (A) | 8.47 | 8.50 | 8.52 | 8.55 | 8.57 |
| | | | | | | |

 $Values \ at \ standard \ test \ conditions \ (STC: air \ mass \ AM 1.5, irradiance \ 10.75 \ W/sq \ ft \ (1000 \ W/m^2), temperature \ 77^{\circ}F \ (25^{\circ}C), based \ on \ a \ production$ $spread with a tolerance of P_{\text{MAX}^c} V_{\text{OC}} \& I_{\text{SC}} \pm 3\% \text{ within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance)} \\$ $800\,\text{W/m}^2, \text{temperature } 68^\circ\text{F}(20^\circ\text{C}), \text{windspeed } 3.3\,\text{ft/s}(1\,\text{m/s}). \\ ^*\text{Where } xxx \text{ indicates the nominal power class}(P_{\text{MAX}}) \text{ at STC above}.$

CERTIFICATIONS

| IEC 61215:2016, IEC 61730:2016, UL 1703, UL 61730 | | | |
|--|-------------------------|--|--|
| IEC 62804 | PID | | |
| IEC 61701 | Salt Mist | | |
| IEC 62716 | Ammonia Resistance | | |
| UL 1703 | Fire Type Class 2 | | |
| IEC 62782 | Dynamic Mechanical Load | | |
| IEC 61215-2:2016 | Hailstone (35mm) | | |
| AS4040.2 NCC 2016 | Cyclic Wind Load | | |
| 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+85°C |
|---|--|
| Maximum system voltage | e: 1000 V |
| Design load (+): snow Maximum test load (+): | 4666 Pa (97.5 lbs/sq ft)⁺ 7000 Pa (146 lbs/sq ft)* |
| Design load (-): wind Maximum test load (-): | 2666 Pa (55.6 lbs/sq ft)* 4000 Pa (83.5 lbs/sq ft)* |
| Max series fuse rating: | 25 A |
| Max reverse current: | 25 A |
| | *Calculated using a safety factor of 1 g |

*See installation manual for mounting instructions

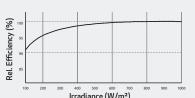
TEMPERATURE RATINGS*

| | 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:





Founded in Norway in 1996, REC is a leading vertically integrated solar energy company. Through integrated manufacturing from silicon to wafers, cells, high-quality panels and extending to solar solutions, REC provides the world with a reliable source of clean energy, REC's renowned product quality is supported by the lowest warranty claims rate in the industry, REC is a Bluestar Elkem company with headquarters in Norway and operational headquarters in Singapore. REC employs around 2,000 peopleworldwide, producing 1.5 GW of solar panels annually.



