

SOLAR'S MOST TRUSTED



REC N-PEAK BLACK SERIES

PREMIUM FULL BLACK MONO
N-TYPE SOLAR PANELS WITH
SUPERIOR PERFORMANCE



MONO N-TYPE: THE
MOST EFFICIENT C-SI
TECHNOLOGY



NO LIGHT INDUCED
DEGRADATION



SUPER-STRONG
FRAME UP TO 7000 PA
SNOW LOAD



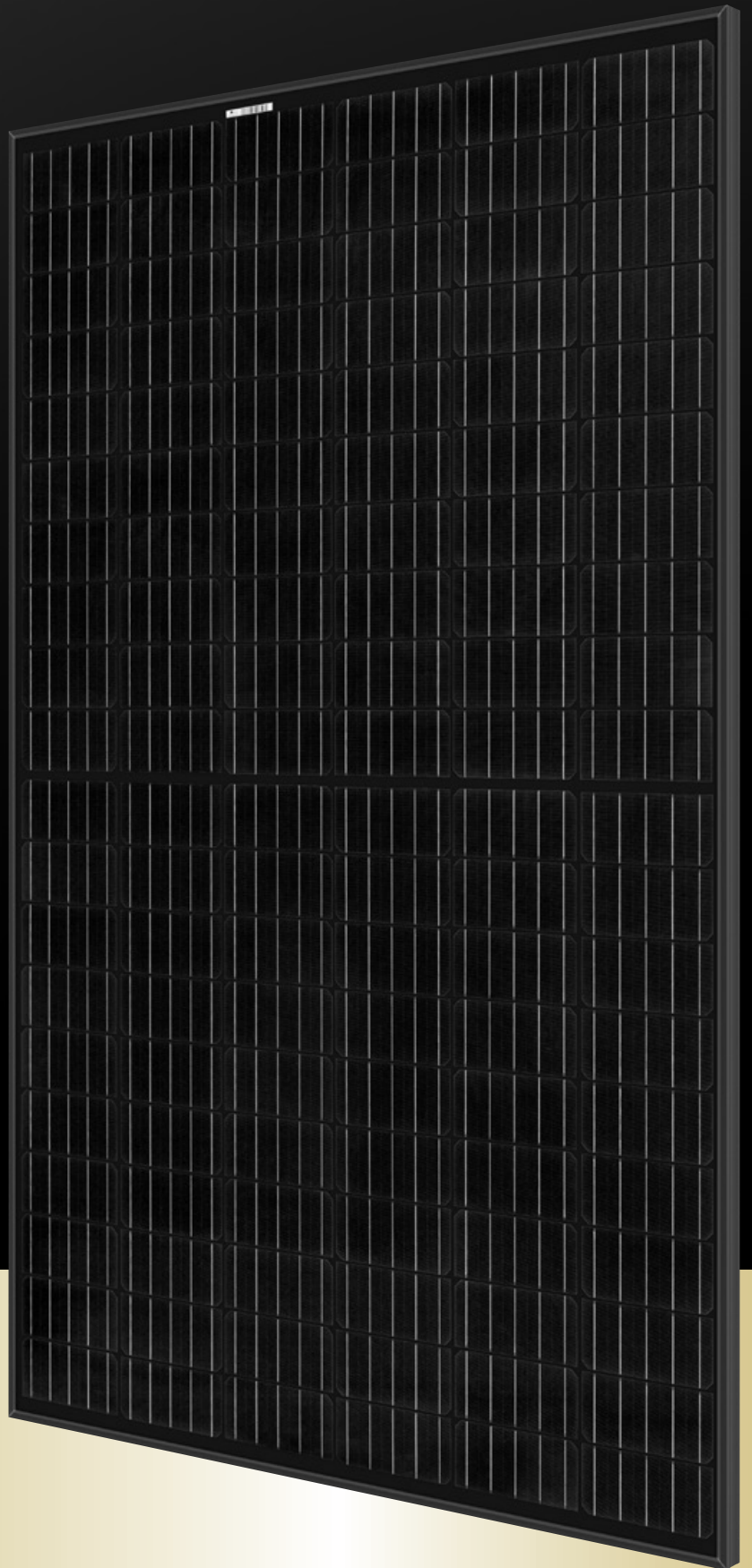
FLEXIBLE
INSTALLATION
OPTIONS



IMPROVED
PERFORMANCE IN
SHADED CONDITIONS



GUARANTEED HIGH
POWER OVER LIFETIME

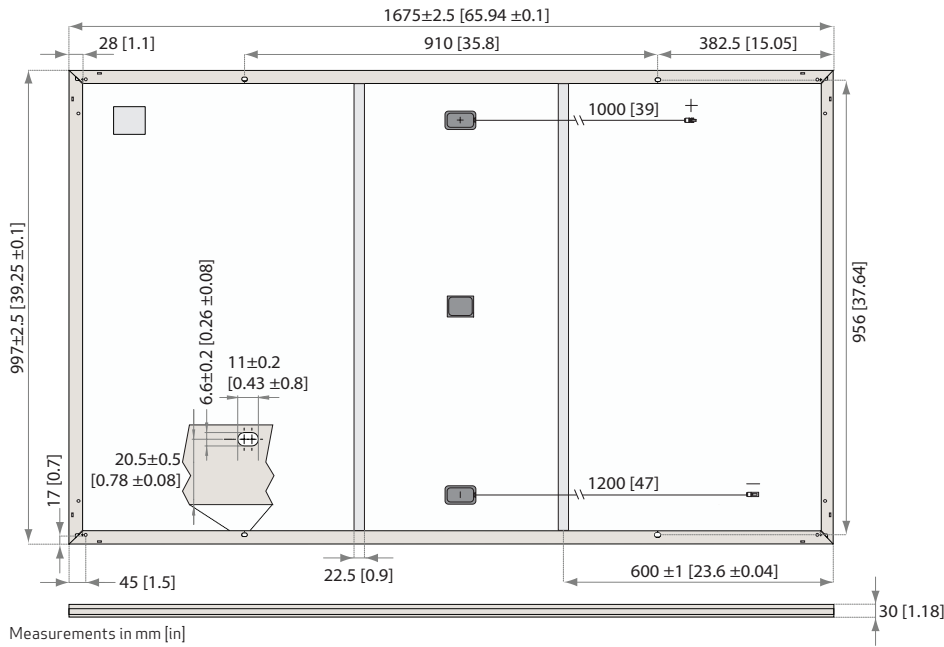


325
WP
POWER



ELIGIBLE FOR

REC N-PEAK BLACK SERIES



ELECTRICAL DATA @ STC

Product code*: RECxxxNP Black

| | 305 | 310 | 315 | 320 | 325 |
|---------------------------------------|-------|-------|-------|-------|-------|
| Nominal Power - P_{MAX} (Wp) | 305 | 310 | 315 | 320 | 325 |
| Watt Class Sorting - (W) | 0/+5 | 0/+5 | 0/+5 | 0/+5 | 0/+5 |
| Nominal Power Voltage - V_{MPP} (V) | 33.3 | 33.6 | 33.9 | 34.2 | 34.4 |
| Nominal Power Current - I_{MPP} (A) | 9.17 | 9.24 | 9.31 | 9.37 | 9.46 |
| Open Circuit Voltage - V_{OC} (V) | 39.3 | 39.7 | 40.0 | 40.3 | 40.7 |
| Short Circuit Current - I_{SC} (A) | 10.06 | 10.12 | 10.17 | 10.22 | 10.28 |
| Panel Efficiency (%) | 18.3 | 18.6 | 18.9 | 19.2 | 19.5 |

Values at standard test conditions (STC: air mass AM1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of P_{MAX} , V_{OC} & I_{SC} ±3% within one watt class.* Where xxx indicates the nominal power class (P_{MAX}) at STC above.

ELECTRICAL DATA @ NOCT

Product code*: RECxxxNP Black

| | 214 | 217 | 221 | 224 | 228 |
|---------------------------------------|------|------|------|------|------|
| Nominal Power - P_{MAX} (Wp) | 214 | 217 | 221 | 224 | 228 |
| Nominal Power Voltage - V_{MPP} (V) | 31.1 | 31.4 | 31.7 | 32.0 | 32.2 |
| Nominal Power Current - I_{MPP} (A) | 6.86 | 6.91 | 6.97 | 7.01 | 7.08 |
| Open Circuit Voltage - V_{OC} (V) | 36.7 | 37.1 | 37.4 | 37.7 | 38.0 |
| Short Circuit Current - I_{SC} (A) | 7.53 | 7.57 | 7.61 | 7.65 | 7.69 |

Nominal operating cell temperature (NOCT: air mass AM1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s).
*Where xxx indicates the nominal power class (P_{MAX}) at STC above.

CERTIFICATIONS



UL 1703 (Fire Type 2), IEC 61215, IEC 61730 & UL 1703; UL 61730, MCS 005, IEC 62804, IEC 61701, IEC 62716, IEC 62782
ISO 9001: 2015, ISO 14001: 2004, OHSAS 18001: 2007

WARRANTY

| | Standard | RECProTrust | |
|--|----------|-------------|-----------|
| Installed by an REC Certified Solar Professional | No | Yes | Yes |
| System Size | Any | ≤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 | 0.5% | 0.5% | 0.5% |
| Power in Year 25 | 86% | 86% | 86% |

See warranty documents for details. Some conditions apply.

GENERAL DATA

| | |
|---------------|---|
| Cell type: | 120 half-cut n-type mono c-Si cells 6 strings of 20 cells in series |
| Glass: | 0.13" (3.2 mm) solar glass with anti-reflection surface treatment |
| Backsheet: | Highly reflective and resistant polymeric construction (black) |
| Frame: | Anodized aluminum (black) |
| Junction box: | 3-part, 3 bypass diodes, IP67 rated in accordance with IEC 62790 |
| Cable: | 12 AWG (4 mm ²) PV wire, 39 + 47" (1 m + 1.2 m) in accordance with EN 50618 |
| Connectors: | Stäubli MC4 PV-KBT4/KST4, 12 AWG (4 mm ²) in accordance with IEC 62852 IP68 only when connected |
| Origin: | Made in Singapore |

MECHANICAL DATA

| | |
|-------------|---|
| Dimensions: | 65.9 x 39.25 x 1.1" (1675 x 997 x 30 mm) |
| Area: | 1798 ft ² (1.67 m ²) |
| Weight: | 39.7 lbs (18 kg) |

MAXIMUM RATINGS

| | |
|--------------------------|--------------------------------------|
| Operational temperature: | -40 ... +85°C |
| Maximum system voltage: | 1000 V |
| Design load (+): snow | 4666 Pa (97.5 lbs/ft ²)* |
| Maximum test load (+): | 7000 Pa (146 lbs/ft ²)* |
| Design load (-): wind | 1600 Pa (33.4 lbs/ft ²)* |
| Maximum test load (-): | 2400 Pa (50 lbs/ft ²)* |
| Max series fuse rating: | 20 A |
| Max reverse current: | 20 A |

* Calculated using a safety factor of 1.5
* See installation manual for mounting instructions

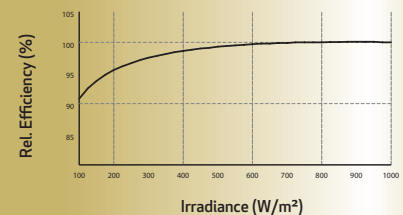
TEMPERATURE RATINGS *

| | |
|--|-------------|
| Nominal Operating Cell Temperature: | 44°C (±2°C) |
| Temperature coefficient of P_{MAX} : | -0.35 %/°C |
| Temperature coefficient of V_{OC} : | -0.27 %/°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 people worldwide, producing 1.5 GW of solar panels annually.