

# REC N-PEAK SERIES

PREMIUM MONO N-TYPE SOLAR PANELS WITH WORLD-CLASS 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



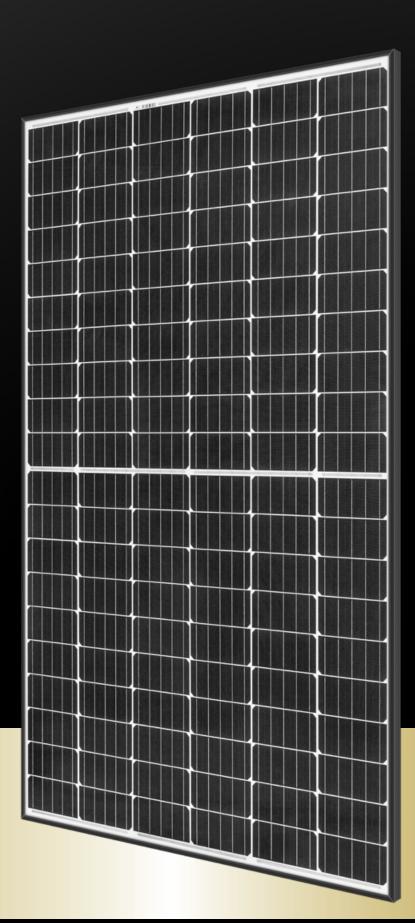
IMPROVED PERFORMANCE IN SHADED CONDITIONS



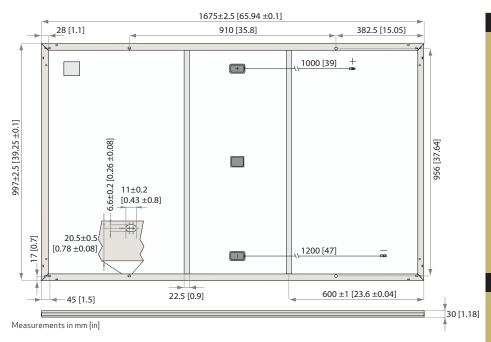
GUARANTEED HIGH POWER OVER LIFETIME







# EC N-PEAK SEI



| ELECTRICAL DATA @ STC                        | Product code*: RECxxxNP |       |       |       |       |       |
|--|-------------------------|-------|-------|-------|-------|-------|
| Nominal Power - P <sub>MAX</sub> (Wp)        | 305                     | 310   | 315   | 320   | 325   | 330   |
| Watt Class Sorting - (W)                     | 0/+5                    | 0/+5  | 0/+5  | 0/+5  | 0/+5  | 0/+5  |
| Nominal Power Voltage - V <sub>MPP</sub> (V) | 33.3                    | 33.6  | 33.9  | 34.2  | 34.4  | 34.6  |
| Nominal Power Current - I <sub>MPP</sub> (A) | 9.17                    | 9.24  | 9.31  | 9.37  | 9.46  | 9.55  |
| Open Circuit Voltage - V <sub>OC</sub> (V)   | 39.3                    | 39.7  | 40.0  | 40.3  | 40.7  | 41.0  |
| Short Circuit Current - I <sub>SC</sub> (A)  | 10.06                   | 10.12 | 10.17 | 10.22 | 10.28 | 10.33 |
| Panel Efficiency (%)                         | 18.3                    | 18.6  | 18.9  | 19.2  | 19.5  | 19.8  |
|  |                         |       |       |       |       |       |

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of  $P_{\text{MAX'}}V_{\text{Oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$  within one watt class. \*Where xxx indicates the nominal power class ( $P_{\text{MAX'}}V_{\text{oc}}\&l_{\text{Ig}}\pm3\%$ 

| ELECTRICAL DATA @ NMOT                       |      | Pro  | duct code*: l | RECxxxNP |      |      |
|--|------|------|---------------|----------|------|------|
| Nominal Power - P <sub>MAX</sub> (Wp)        | 231  | 234  | 238           | 242      | 246  | 250  |
| Nominal Power Voltage - $V_{MPP}(V)$         | 31.1 | 31.4 | 31.7          | 32.0     | 32.2 | 32.4 |
| Nominal Power Current - I <sub>MPP</sub> (A) | 7.41 | 7.46 | 7.52          | 7.57     | 7.64 | 7.71 |
| Open Circuit Voltage - V <sub>oc</sub> (V)   | 36.7 | 37.1 | 37.4          | 37.7     | 38.0 | 38.3 |
| Short Circuit Current - I <sub>sc</sub> (A)  | 8.13 | 8.17 | 8.21          | 8.25     | 8.30 | 8.34 |

Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s). \*Where xxx indicates the nominal power class ( $P_{Max}$ ) at STC above.

WARRANTY

### **CERTIFICATIONS**



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



|   | Standard | REC ProTrust |           |
|---|----------|--------------|-----------|
| Installed by an REC Certified<br>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 mono c-Si n-type cells 6 strings of 20 cells in series

Glass 3.2 mm solar glass with anti-reflection surface treatment

Backsheet: Highly resistant polymeric construction

Frame: Anodized aluminum (black) 3-part, 3 bypass diodes, IP67 rated Junction box:

accordance with IEC 62790 Cable: 4 mm<sup>2</sup> solar cable, 1.0 m + 1.2 m

in accordance with EN 50618

Stäubli MC4 PV-KBT4/KST4 (4 mm²) Connectors:

in accordance with IEC 62852 IP68 only when connected

Origin: Made in Singapore

# **MECHANICAL DATA**

| Dimensions: | 1675 x 997 x 30 mm  |
|-------------|---------------------|
| Area:       | 1.67 m <sup>2</sup> |
| Weight:     | 18 kg               |

#### **MAXIMUM RATINGS**

| Operational temperature:                        | -40+85°C                                     |
|---|--|
| Maximum system voltage:                         | 1000 V                                       |
| Design load (+): snow<br>Maximum test load (+): | 4666 Pa (475 kg/m²)*<br>7000 Pa (713 kg/m²)* |
| Design load (-): wind<br>Maximum test load (-): | 2666 Pa (271 kg/m²)*<br>4000 Pa (407 kg/m²)* |
| Max series fuse rating:                         | 25 A   |
| Max reverse current:                            | 25 A   |

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

#### **TEMPERATURE RATINGS\***

| Nominal Module Operating Temperature:        | 44°C (±2°C) |
|--|-------------|
| Temperature coefficient of $P_{MAX}$ :       | -0.35 %/°C  |
| Temperature coefficient of V <sub>oc</sub> : | -0.27 %/°C  |
| Temperature coefficient of I <sub>SC</sub> : | 0.04 %/°C   |
|  |             |

The temperature coefficients stated are linear values

## **LOW LIGHT BEHAVIOUR**

Typical low irradiance performance of module at STC:



REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power in order to facilitate global energy transitions. Committed to quality and innovation, REC offers photovoltaic modules with leading high quality, backed by an exceptional low warranty claims rate of less than 100 ppm. Founded in Norway in 1996, REC employs 2,000 people and has an annual solar panel capacity of 1.8 GW. With over 10 GW installed worldwide, REC is empowering more than 16 million people with clean solar energy. REC Group is a Bluestar Elkem company with headquarters in Norway, operational headquarters in Singapore, and regional bases in North America, Europe, and Asia-Pacific.

