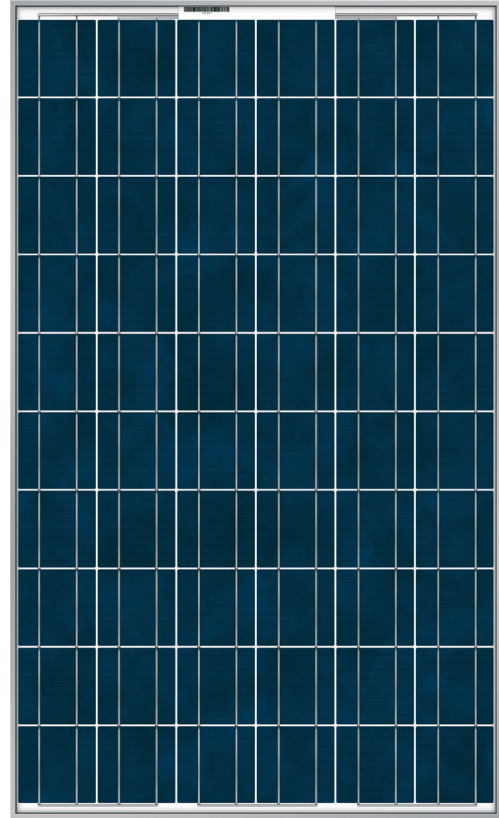




SOLAR MODULE REC AE (DE) SERIES

DATA SHEET

Product-Types:
REC210AE (DE)
REC215AE (DE)
REC220AE (DE)
REC225AE (DE)
REC230AE (DE)



UNCOMPROMISING QUALITY

The REC AE (DE) Series is a high quality series of solar modules designed to meet exceptional system and module performance. REC manufactures its own silicon, wafers, cells and modules and does extensive quality control throughout the complete production process. REC is able to provide a secure, steady supply of modules that are manufactured to the highest standards of quality from beginning to end.

The REC AE (DE) Series utilizes 60 high-efficiency multi-crystalline cells which provide outstanding performance in low-light conditions. The easy access rear junction box has built-in bypass diodes to minimize the effects of shading. The laminate's Tedlar backing and anodized aluminium frame ensure years of peak performance.

The modules are designed to withstand heavy snow and wind conditions.

QUICK INSTALLATION

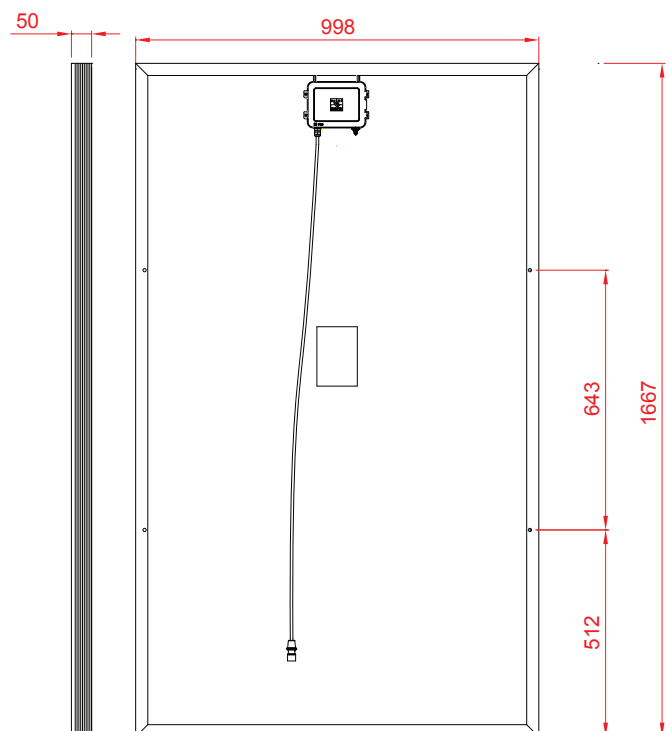
The REC AE (DE) Series allows quick and easy installation. The modules use the Lumberg system for module interconnection.

ENVIRONMENTALLY FRIENDLY PRODUCTS & PROCESSES

The REC AE (DE) Series generates reliable and environmentally friendly electricity. The cell and module production processes are designed to maximize recycling and reduce environmental impact.

FIRST-CLASS WARRANTY

The REC AE (DE) modules come with a guarantee of 90% of minimum rated power output after 10 years and 80% of minimum rated power output after 25 years. The modules have a limited 5 years warranty on materials and workmanship.



MODULE TYPE
REC AE (DE) SERIES
CELL TYPE
**210 Wp
Multi**
**215 Wp
Multi**
**220 Wp
Multi**
**225 Wp
Multi**
**230 Wp
Multi**
ELECTRICAL DATA

| | | | | | |
|--|-------|-------|-------|-------|-------|
| Peak Power Watts - P _{mpp} (Wp) | 210 | 215 | 220 | 225 | 230 |
| Power Output Tolerance - P _{mpp} (%) | ± 5 | ± 5 | ± 5 | ± 5 | ± 5 |
| Maximum Power Voltage - V _{mpp} (V) | 28.0 | 28.3 | 28.7 | 29.1 | 29.4 |
| Maximum Power Current - I _{mpp} (A) | 7.5 | 7.6 | 7.7 | 7.7 | 7.8 |
| Open Circuit Voltage - V _{oc} (V) | 36.1 | 36.3 | 36.6 | 36.8 | 37.1 |
| Short Circuit Current - I _{sc} (A) | 8.1 | 8.1 | 8.2 | 8.2 | 8.3 |
| Temperature Coefficient of P _{mpp} (%/°C) | -0.45 | -0.45 | -0.45 | -0.45 | -0.45 |
| Temperature Coefficient of V _{oc} (%/°C) | -0.34 | -0.34 | -0.34 | -0.34 | -0.34 |
| Temperature Coefficient of I _{sc} (%/°C) | 0.074 | 0.074 | 0.074 | 0.074 | 0.074 |
| Module Efficiency (%) | 12.7 | 13.0 | 13.3 | 13.6 | 13.9 |
| Max Series Fuse Rating (A) | 15 | 15 | 15 | 15 | 15 |

 Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000 W/m², Cell temperature 25 °C)

NOCT (Nominal Operating Cell Temperature) 45°C ±2

 The NOCT value are reached at an irradiance of 800 W/m², at an ambient temperature of 20 °C and a wind speed of 1 m/s.

SIZE AND WEIGHT
REC AE (DE)

| | |
|----------------------|---------------------|
| Area | 1.66 m ² |
| Length | 1667 mm |
| Width | 998 mm |
| Thickness with frame | 50 mm |
| Weight | 24 kg |

OPERATION LIMITS

| | |
|--------------------------|--|
| Module temperature range | -40... +80°C |
| Maximum System Voltage | 1000 V |
| Snow load | 5400 Pa, equals 550 kg/m ² (requires mounting according to installation instructions) |
| Wind load | Rated for wind speed of up to 130 km/t with security factor 3 (3 * 800 Pa). |

GENERAL

| | |
|---------------|---|
| Cells | Multi-crystalline cells |
| Module | 156mm x 156mm, 60 in series per module. |
| Front | High-transparency specially doped solar glass with UV filter. |
| Encapsulation | EVA. |
| Backsheet | Tedlar foil. |
| Frame | Anodized aluminium. |

Connection

 Lumberg system: 2.6 m connecting cable 4 mm² with overmolded plug and chassis socket.

Note! Specifications subject to change without notice.


CERTIFICATION / STANDARDS

Build to meet IEC 61215 2. Edition


 For further information contact your local distributor or visit our web site: www.recgroup.com