

SOLAR MODULE

DATA SHEET

SCM205 SCM210 SCM215 SCM220 SCM225 SCM230

UNCOMPROMISING QUALITY

The SCM 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 can be depended upon to provide a secure, steady supply of modules that are manufactured to the highest standards of quality from beginning to end.

The SCM Series utilizes 60 high-efficiency, multi-crystalline 6.14 inch (156mm) square cells. The modules provide outstanding performance in low-light conditions due to their special glass treatment. 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 ensures many years of peak performance.

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

QUICK INSTALLATION

Multi-Contact Solarline 2 (MC4) locking connectors allow quick and easy inter-module connection, and system installation. The MC Flex-Sol double-insulated output wiring provides for safer array wiring, and makes the SCM Series compatible with the use of transformerless inverter technology. This insures that the SCM Series is ready today to work with tomorrow's inverter technologies.

ENVIRONMENTALLY FRIENDLY PRODUCTS & PROCESSES

The SCM Series series generates reliable and environmentally friendly electricity. The cell and module production processes are designed to maximize recycling and reduce environmental impact. REC polysilicon is manufactured in the US (Moses Lake, WA and Butte, MO). REC wafers, cells and modules are manufactured in Scandinavia.

FIRST-CLASS WARRANTY

The SCM Series modules come with a guarantee of 90% of rated power output after 10 years and 80% of rated power output after 25 years. The modules have a 63-month limited warranty on materials and workmanship.





| MODULE TYPE | SCM SERIES | | | | | |
|---|---------------------------|-----------------|-------------|---------|---------|---------|
| | | | | | | |
| MODEL | SCM205 | SCM210 | SCM215 | SCM220 | SCM225 | SCM230 |
| ELECTRICAL DATA | | | | | | |
| Peak Power Watts - Pmpp (Wp) | 205 | 210 | 215 | 220 | 225 | 230 |
| Power Output Tolerance - Pmpp (%) | ±3 | ±3 | ±3 | ±3 | ±3 | ±3 |
| Maximum Power Voltage - Vmpp (V) | 28.1 | 28.2 | 28.3 | 28.7 | 29.1 | 29.4 |
| Maximum Power Current - Impp (A) | 7.3 | 7.5 | 7.6 | 7.7 | 7.7 | 7.8 |
| Open Circuit Voltage - Voc (V) | 36.1 | 36.1 | 36.3 | 36.6 | 36.8 | 37.1 |
| Short Circuit Current - Isc (A) | 7.9 | 8.1 | 8.1 | 8.2 | 8.2 | 8.3 |
| Temperature Coefficient of Pmpp (%/°C) | - 0.452 | - 0.452 | - 0.452 | - 0.452 | - 0.452 | - 0.452 |
| Temperature Coefficient of Voc (%/°C) | - 0.34 | - 0.34 | - 0.34 | - 0.34 | - 0.34 | - 0.34 |
| Temperature Coefficient of Isc (%/°C) | 0.074 | 0.074 | 0.074 | 0.074 | 0.074 | 0.074 |
| Cell Efficiency (%) | 14.0 | 14.4 | 14.7 | 15.1 | 15.4 | 15.8 |
| Module Efficiency (%) | 12.4 | 12.7 | 13.0 | 13.3 | 13.6 | 13.9 |
| Max Series Fuse Rating (A) | 15 | 15 | 15 | 15 | 15 | 15 |
| Values at Standard Test Conditions STC (Air Mass AM 1.5, Irradiance 1000 W/m ² , Cell temperature 25 °C) | | | | | | |
| | | | | | | |
| NOCT (Nominal Operating Cell Temperature) | 47.5°C±2 | | | | | |
| The NOCT values are reached at an irradiance of 800 W/m ² , at an ambient tem | perature of 68 °F [20 °C] | and a wind spee | d of 1 m/s. | | | |

Performance measurements at different low irradiance levels: 800 W/m² = - 19.6%, 500 W/m² = - 49.8%, 200 W/m² = - 80.6%.

| SIZE AND WEIGHT | SCM SERIES |
|----------------------|--|
| Area | 17.76 ft ² [1.65 m ²] |
| Length | 65.55 in [1665 mm] |
| Width | 39.02 in [991 mm] |
| Thickness with frame | 1.69 in [43 mm] |
| Weight | 48.50 lbs [22 kg] |

OPERATING CONDITIONS

| Module temperature range | - 40 + 176°F [- 40 + 80°C] |
|--------------------------|--|
| Maximum System Voltage | 600 V |
| Mechanical load | 5400 Pa, equals 112.8 lbs/ft ² [551 kg/m ²] |
| Wind speed | Rated for wind speed of up to 122 mph |
| | [197 km/t] with security factor 3 *. |
| Fire Rating: | Class C |
| | |

* Tested with 3 x 122 mph (security factor 3).

GENERAL

Cells Multi-crystalline cells

156mm x 156mm, 60 in series per module.

Module Front

Frame

Encapsulation Backsheet Junction box High-transparency solar glass with antireflection surface treatment. EVA. TPT foil. Multi-Contact Solarline 2 (MC4), 3 bypass diodes. Clear anodized aluminium.

Connection 2 x 61 inches [1.55 m] solar cables with MC4 connectors.

Note: Specifications subject to change without notice.





CERTIFICATION / STANDARDS Complies to UL 1703 - 3rd edition