



# REW PREMIUM PLUS™

**REW PREMIUM PLUS™ UM 96 MONOCRYSTALLINE 215 - 240 W**

With the Premium Plus™ module series, REW SOLAR® have now positioned ourselves to deliver the leading high-performance, silicon-crystal-based module. Research and development have enabled this module to attain the highest yields, which means that now we are probably the first company worldwide to be able to offer silicon modules with a generating performance which is always above the nominal value. Today we can even guarantee added performance at anytime of between +7% and +12% of the nominal performance. In other words only the nominal performance is charged for. Increased performance of 9% on average is complimentary, yield risk therefore no longer exists. With this module, less favourable customer projects are now achieving the highest yields.

Our Premium series is manufactured by the leading German plant builder Centrotherm on their fully automated production lines (no hand soldering or adhesive fittings). Quality control is carried out by independent specialists who ensure that our customers benefit from top industrial performance.

We are able to guarantee these performance rates for many years. After 25 years we still guarantee 90% of the nominal performance and after 30 years we continue to guarantee 85% of the nominal rates. After that we still expect highly respectable returns for many years to come. This constitutes a level of customer protection unparalleled on the market today.

The Premium Plus™ module series bears the performance and safety certificates from world recognised test institutes and is in full conformity with all relevant National and International standards. Mechanical load resistance, electrical safety and long-lasting durability are constantly guaranteed.

## **Premium Plus™**

Guaranteed yield for many years

### **THE ADVANTAGES:**

- Positive only performance of +7% to +12%
- Top yields from a compact module surface
- Unique performance guarantee of 30 years
- Production monitoring by the technical inspection bodies (TÜV) Rheinland
- 4 Bypass diodes
- Fully automated module production
- Electroluminescence & Flash tests on every single module
- Highly efficient German engineering



Similar image



Subject to modifications/technical improvements

# REW PREMIUM PLUS™

## Electric parameters

REW Premium Plus™ Type	RPP215 UM96	RPP220 UM96	RPP225 UM96	RPP230 UM96	RPP235 UM96	RPP240 UM96
Rated power (P <sub>mpp</sub> ) * [W]	215	220	225	230	235	240
Rated voltage (U <sub>mpp</sub> ) [V]	47,3	47,6	47,7	47,8	47,9	48,0
Rated current (I <sub>mpp</sub> ) [A]	4,97	5,04	5,14	5,23	5,33	5,42
Open-circuit voltage (U <sub>oc</sub> ) [V]	59,1	59,3	59,6	59,9	60,0	60,1
Short circuit current (I <sub>sc</sub> ) [A]	5,42	5,52	5,62	5,73	5,82	5,89
Cell Efficiency [%]	16,5	16,8	16,8	17,2	17,2	17,5
Module Efficiency [%]	13,8	14,1	14,4	14,7	15,0	15,3

\* Availability of the performance class will be checked on enquiry

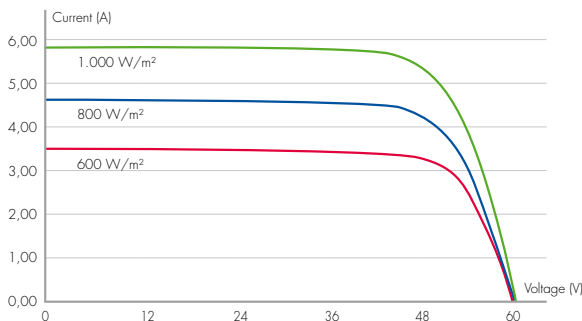
Power tolerance	+7% to +12%
Cell type	monocrystalline
max. system voltage [V]	1.000 (EU) / 600 (USA)
Operating Temperature	- 40° C to + 85° C

Temperature coefficient $\alpha$ (U <sub>oc</sub> )	- 0,35% / ° C
Temperature coefficient P <sub>max</sub>	- 0,40% / ° C
Temperature coefficient $\beta$ (I <sub>sc</sub> )	0,065% / ° C
NOCT	47 ± 2° C

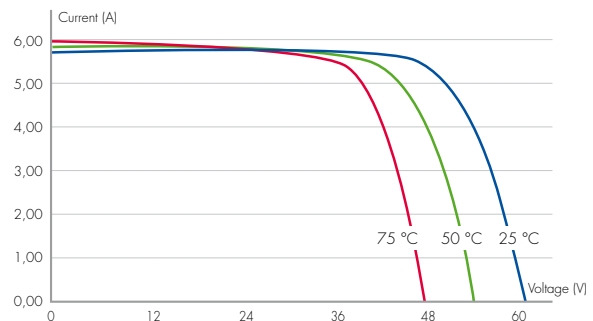
Performance figures under standard test conditions: Radiation strength 1.000 W/m<sup>2</sup>, Air Mass 1.5, cell temperature 25° C. Deviation from U<sub>mpp</sub> [V], I<sub>mpp</sub> [A], U<sub>oc</sub> [V] and I<sub>sc</sub> [A] of ±10%.

## Characteristic curve

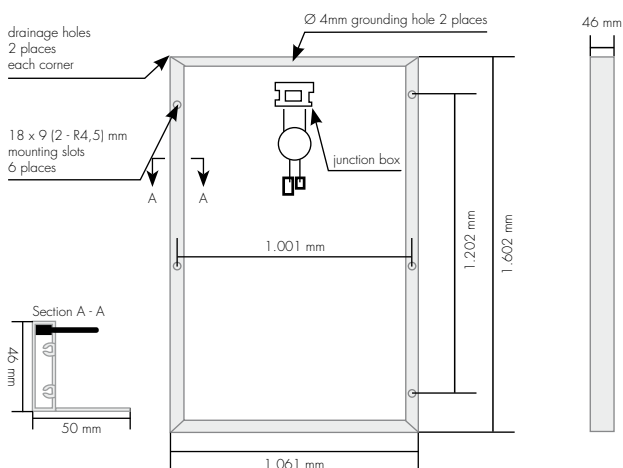
IU Curves at different irradiance



IU Curves at different temperature



## Technical drawing



Data subject to amendment. As a result of constant development and production improvements, the specifications and information in this technical data sheet may be amended without prior announcement.

## Mechanical parameters

Outer dimensions (L x W x H)	1.602 x 1.061 x 46 mm
Cell dimensions	125 x 125 mm
Number of cells	96 (8 x 12)
Weight	21 kg

## Performance warranty (minimum capacity)

Performance warranty on 95% **	12 years
Performance warranty on 90% **	25 years
Performance warranty on 85% **	30 years

\*\* of the module's rated power

## Tested conformity acc. to:

IEC 61215, IEC 61730, CE, ISO 9001, UL, MSC

