

## high performance photovoltaic module for individual solutions

Photovoltaic modules directly utilize the sun -an infinite energy source- by converting solar radiation into electric energy. Quite often the roof surfaces are used for this type of energy harvest, whether in private, commercial, or public buildings.

Our **res-PV** modules have outstanding performance qualities. In order to meet the requirements of the most discriminating customers, regarding the roof design, we offer our **res-PV** modules with an anodized aluminum frame (special order also in black), and frameless laminate, optionally with black or white backing foil, for roof-integrated installations.

**res-PV** modules have the same dimensions as our **res-PV++** combi-modules, which are used in our **res-solAutark\*** energy and climatic system. Since the number of **res-PV++** combi-modules is calculated by the heat requirements of a building, the remaining roof space can be covered with standard **res-PV** modules, which do not have the cooling feature of the **res-PV++** combi-modules.

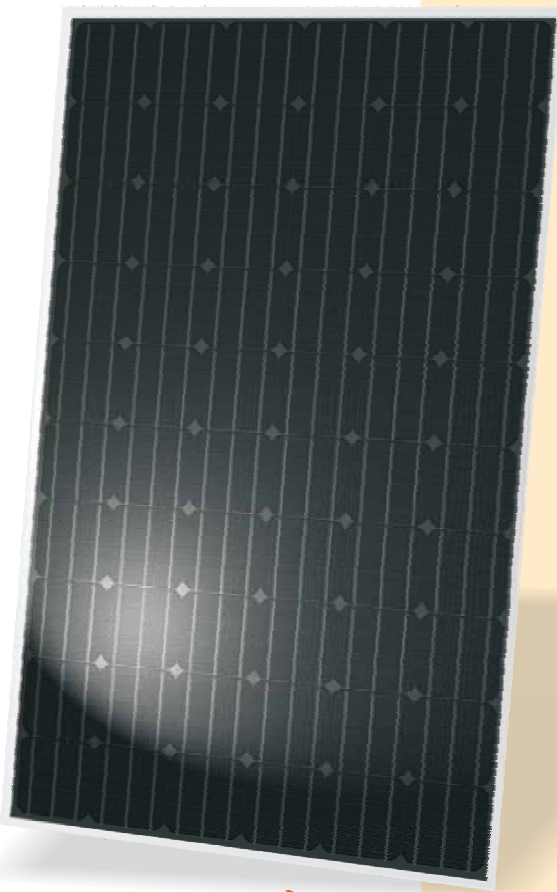
### res-PV modules at a glance

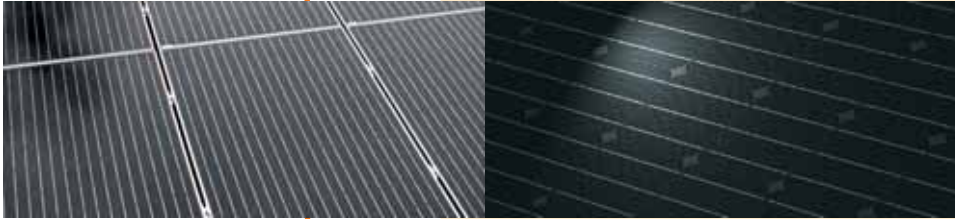
- ▶ 25 years performance guarantee
- ▶ made in Germany
- ▶ high area energy conversion efficiency
- ▶ high quality mono-crystalline solar cells
- ▶ easy plug-in installation
- ▶ antireflection coating

\* **res-solAutark\*** is an energy and climate system for buildings.

It heats in the winter and cools in the summer, provides hot tap water, and it can generate more power than it needs. And all this without emissions and burning of fossil fuels or renewable resources. In other words, **res-solAutark** saves resources, as well as the environment and the climate – and you will be largely independent of fluctuating commodity prices.

More information: [www.res-energie.eu](http://www.res-energie.eu)





		res-PV 240	res-PV 244
<b>Electrical data</b>	Unit		
Nom. power at $P_{MPP}$	Wp	240	244
Voltage at $P_{MPP}$	V	29.80	29.90
Current at $P_{MPP}$	A	8.07	8.17
Open circuit voltage current $V_{OC}$	V	36.55	36.60
Short circuit current $I_{SC}$	A	8.40	8.50
Tolerance	%	± 3	
Temperature coefficient $P_{MPP}$	%/K	-0.47	
Temperature coefficient $I_{SC}$	%/K	0.02	
Temperature coefficient $V_{OC}$	%/K	-0.36	
Max. system voltage	V	1000	
Safety class		II	
Cell efficiency	%	16.25	16.50
Number of cells per module	no.	60	
Number of bypass diodes	no.	3	

#### Data of rear frame module

Dimensions L x W x D	mm	1659 x 1013 x 48
Module weight	kg	23

#### Data of standard frame module

Dimensions L x W x D	mm	1654 x 988 x 38
Module weight	kg	22.50

All electrical values correspond to STC, Standard Test Conditions.  
Irradiation 1000 W/m<sup>2</sup>, cell temperature 25°C, AM 1.5