

For a Free Quote:

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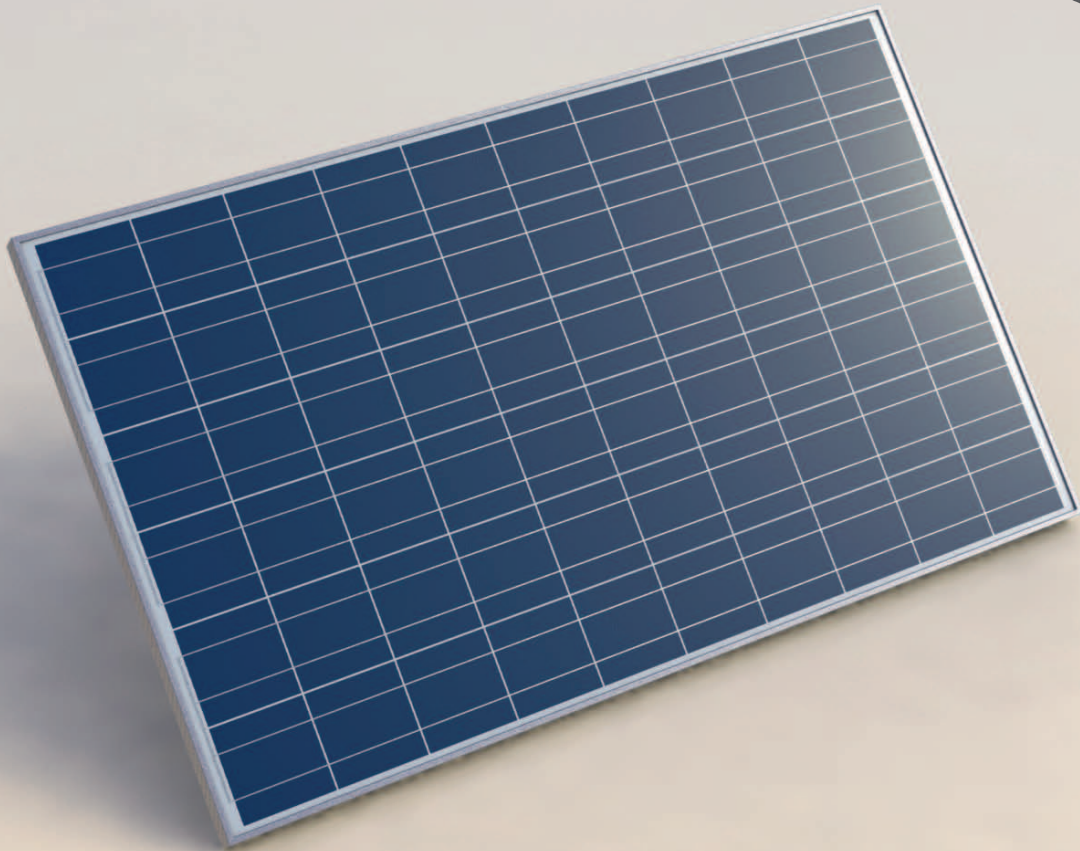
**Solar Panel Guide
Specification Data Sheet**

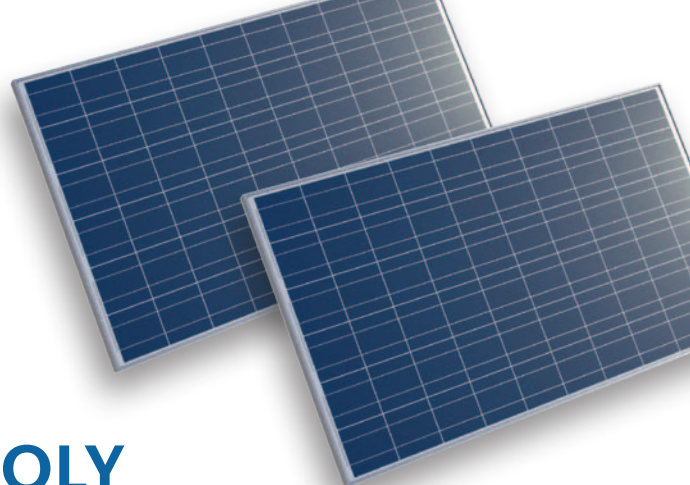
**ZSD GmbH – zentralsolar deutschland
Poly
Genius ES-P 240**

Also available on the web at
EnergyPal.com/zsd-gmbh-zentralsolar-deutschland-solar-panels/genius-es-p-240

SOLAR PANEL GENIUS POLY

SHIMMERING
ENERGY GIANT.





SOLAR PANEL GENIUS POLY

The top performer.

Our high-performance solar cells guarantee to the operator a particularly high annual energy yield – and an efficiency level of up to 16 %. Additionally they are extremely weatherproof, thanks to the 4 mm thick solar glass and the sturdy but easy-to-install

aluminium frames. Wind loading of up to 2400 and snow loading of up to 5400 Pascal are no problem to the polycrystalline solar panels – they last and last and last... even in regions with particularly severe weather conditions.



Awarded:

RAL-certified all along the line

We are one of the few companies in Germany, which are certified in all four categories of the photovoltaic area of RAL-GZ 966.



CE trademark

Declaration of conformity

Guarantee of adherence to all safety and health requirements under EU guidelines Art. 288, Paragraph 3 AEUV.



IEC 61215

Construction type certification of PV panels by TÜV Rheinland according to IEC 61215 Testing and certification of all PV components to international standards (IEC 61215) as regards thermal, mechanical and radiation-related loading.

Solar panel composition:

- 1 Anodised aluminium frame
- 2 3.2 mm toughened glass
- 3 EVA film
- 4 Monocrystalline cells
- 5 EVA film
- 6 PVF film, white
- 7 Junction box and identification plate



Term			Genius ES-P 240	Genius ES-P 245	Genius ES-P 250
Cell type			Polycrystalline	Polycrystalline	Polycrystalline
Number of cells	piece		60	60	60
Number of bypass diodes	piece		3	3	3
String switching in panel			3 x 20	3 x 20	3 x 20
Cell measurement, a x b mm	mm		156 x 156	156 x 156	156 x 156
Nominal power (-0/+3%)	P_N	Wp	240	245	250
Nominal voltage	V_{MP}	V	30,6	30,75	30,9
Nominal current	I_{MP}	A	7,85	7,97	8,1
Open-circuit voltage	V_{OC}	V	37,5	37,8	38,1
Short-circuit current	I_{SC}	A	8,4	8,52	8,65
System tension, max.	$V_{SYS-MAX}$	V	1000	1000	1000
Insulation resistance	R_{ISO}	MΩ	>100	>100	>100
Temp. coefficient					
Open-circuit voltage	TK (V_{OC})	%/K	-0,34	-0,34	-0,34
Temp. coefficient					
Short-circuit current	TK (I_{SC})	%/K	+0,028	+0,028	+0,028
Temperature range	θ	°C	-40/+85	-40/+85	-40/+85
Panel efficiency level	η	%	14,75	15,06	15,36
Length	L	mm	1650	1650	1650
Width	B	mm	992	992	992
Frame strength	T	mm	50	50	50
Weight	m	kg	20	20	20
Glass strength	d	mm	4	4	4
Area loading	m_L	kg/m ²	550	550	550
Junction box	Material		Plastic	Plastic	Plastic
Protection class	IP		65	65	65
Connection	cable Ø	mm ²	4	4	4
	cable L	m	0,9	0,9	0,9
Connector plug			MC4	MC4	MC4



IEC 61730

Safety qualification of PV panels

IEC 61730 defines compulsory construction features of the panels, requirements for the materials used in the panel and regarding the documentation.



Protection Class II

Reinforced or double insulation under VDE 0100 Part 410, 412.1.



CdTe

Cadmium telluride free

Guarantees that our solar cells are free from cadmium telluride.



PV-CYCLE

Member of the Return and Recycling Programme

As a member of the voluntary Return and Recycling Programme for old models, we guarantee adherence to the promise of comprehensive sustainability.

WHEN IT COMES TO THE ENVIRONMENT, WE DO IN ROME WHAT THE ROMANS DO.

VfL Wolfsburg has won a large environmental partner. With zentralsolar deutschland, the Bundesliga competitor has entered into cooperation within the framework of its Corporate Social Responsibility Activities (CSR).



HIGHLY ADVANTAGEOUS.

Peak Performance.

We rely on mono and polycrystalline cells, which are further processed within their own production. Our technologically high processing level is a guarantee of the subsequent faultless operation of the photovoltaic system, which provides high energy yields at fair manufacturing costs.

Best Warranty.

For the worst-case scenario we guarantee an enhanced warranty on our solar panels: 12 years performance guarantee at 90% and 25 years performance guarantee at 80% of the stated minimum performance. There is also a 10 year product warranty.

Highest Performance Tolerance.

A particularly narrow selection of panel performance enables row switching with low switching losses.

Very simple and quick mounting.

The cables and plug connections (TÜV checked) pre-installed in the factory ensure simple and quick installation.

Extremely High Tension.

All our panels fall into protection category II and are designed for a maximum system tension of 1,000 V. They are suitable both for facilities connected to the grid and for isolated systems that are not connected to the public electricity supply.

You can rely on our qualified Service Partners: