

GALAXY ENERGY SOLAR MODULE
GS SERIES 145 - 155W MONO 36-6

Energy Systems for the future

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ELECTRICAL SPECIFICATIONS (STC)

			GS145m	GS150m	GS155m
maximum power	P_{MPP}	**Wp**	145	150	155
maximum power point voltage	U_{MPP}	**V**	17,20	17,20	17,20
maximum power point current	I_{MPP}	**A**	8,43	8,72	9,01
open circuit voltage	U_{OC}	**V**	21,60	21,60	21,60
short circuit current	I_{SC}	**A**	8,98	9,25	9,52
module efficiency		**%**	14,70	15,20	15,70
module power tolerance		**%**	-0/+2%	-0/+2%	-0/+2%
maximum reverse current	**IR**	**A**	14A	14A	14A

Die elektrischen Daten gelten bei Standard-Test-Bedingungen (STC): 1000 W/m²; 25°C; AM 1,5

TEMPERATURE COEFFICIENT

temperature limit	°C		-40°C~+85°C
nominal cell temperature	NOCT	°C	45+-3°C
power	P_{MPP}	%/K	-0,42%/K
voltage	U_{MPP}	%/K	-0,32%/K
current	I_{SC}	%/K	+0,05%/K
open circuit voltage	U_{OC}	%/K	-0,32%/K
short circuit current	I_{SC}	%/K	+0,05%/K

DIMENSIONS AND WEIGHT

length x width	1012x990 mm
frame size - height	50 mm
weight	12,00 kg

BASIC DATA

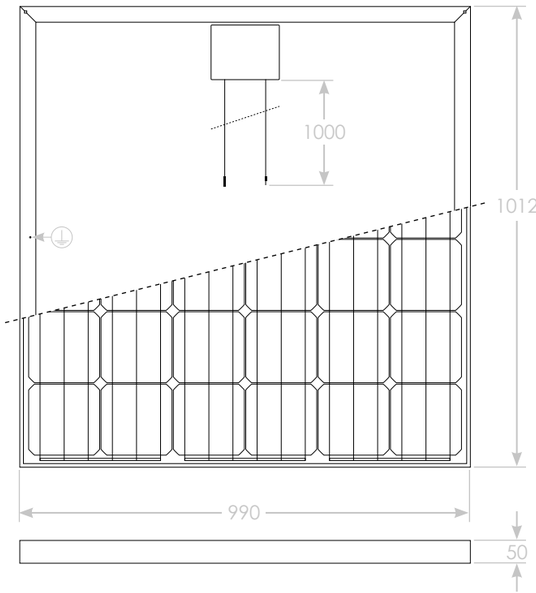
cells per module	36 pieces
cell dimensions	156x156mm; 6Inch
cell type	Monocristalline-Si
bypassdiods in the module	6 pieces - parallel
junction box	Galaxy Box - IP65
connecting cables	4mm² / 1000mm
connectors	GE4 with Goldcontact
low iron glass	3,2mm annealed
hollow frame profile	anodized aluminum

LIMITS

maximum system voltage	1000 V (IEC) DC
maximum weight load	550 kg/m²
fire class	C

CERTIFICATES AND GUARANTEES





Aluminium junction boxes
All module types are available with aluminium junction box.
- Absolute fire safety
- Low resistance
- 100 % ammonia resistance

Galaxy Energy junction boxes
Our own-developed junction box for more performance and securtity.
- Low resistance
- Better cooling effect
- Goretex membrane
- 1 m cable length

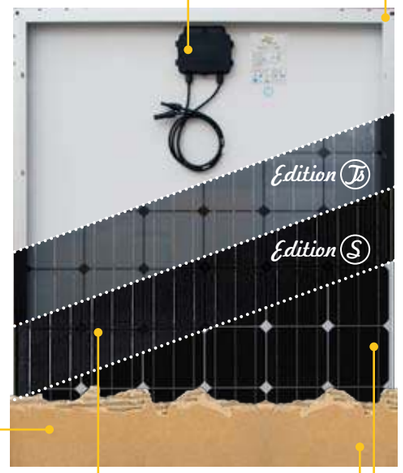


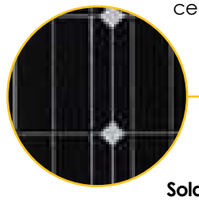
50mm frame
Sturdy hollow chamber frame profiles with a height of 50mm are used. In the edges the frame is pressed with a reverse angle. This method prevents the modules from extreme twist and thereby prevents micro cracks in the cells. Thus a continuously high performance can be guaranteed.

Calibration frame
For a perfect mounting work and an optically harmonic pv plant all our modules are calibrated for exact squareness.

Double bonding
The double bonding introduced by us cares for absolute tightness between frame and laminate and is due to that an absolutely necessary criterion. It furthermore belongs to the Galaxy Standard and guarantees high longevity for all our module types.

3,2 mm tempered textured glass
The ideal solution for high light transmission and optimum stability – the structure prevents the sun rays from reflecting on the pane, that ensures as much light as possible getting on the cell.



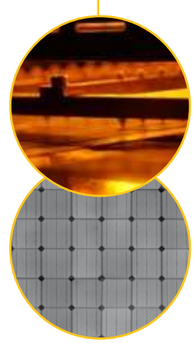


Solar glasses without AR-coating
Many module manufacturers nowadays use solar glasses with chemically applied anti-reflection-coat.
The short-living AR-coating increases the module performance by 3 – 5 %. Already within the first years, the modules lose 3 – 5 performance due to the loss of this coating.
Due to that reason we exclusively use modules without AR-coating.



Warranty
We, as multiple awarded company, keep our promises – always.

- 10 years product warranty
- 25 years performance guarantee
- DIN ISO and TÜV certified
- Plus tolerance performance bond
- Fire protection class C
- High capacitance up to 550kg/m²



Fully automated soldering
We exclusively use cells with the highest efficiencies possible. All cells are soldered almost contactless and are stringed fully-automated.

100% EL controlled
All modules are checked for electroluminescene, that's how me make sure that our modules leave production without any micro cracks.



Vertical packaging
All modules are packed vertically from us, due to that fact the laminates have no chance to swing or twist also with ungentle transport conditions. The accruement of micro cracks is consequently reduced to an absolute minimum.

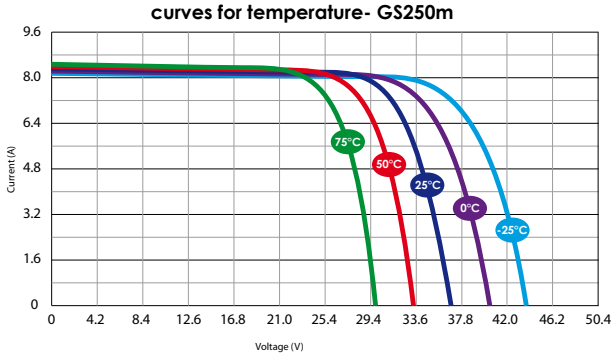
The precision assembly of all of these components is the signature of the Galaxy modules.

In our DIN ISO9001 and DIN 14001 certified company, quality and environmental friendliness are at the first place. All components such as cells, glass, junction box and cables are subject to constant controls.

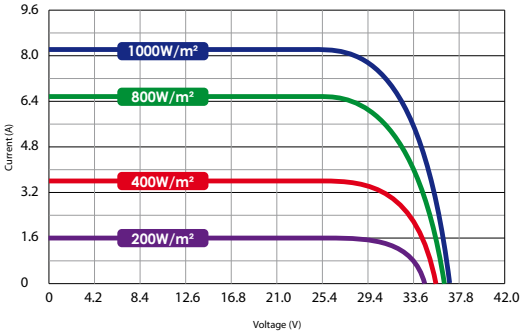
Every module is flashed before and after lamination and is EL-tested to detect any possible micro cracks. This very fact enables us to offer a 10 year product guarantee. The combination of the performance guarantee for 25 years ensures a secure investment for the future.

Galaxy Energy guarantees optimum quality and a sustained performance of the module.

curves for temperature- GS250m



curves for irradiance - GS250m



DLG Fokus Test 2011
ammonia resistance

PLUS X AWARD 2012
best product of the year

innovation Award 2013

Intersolar AWARD 2013
Solar Projects in Europe

German middle class
Summit 2014
TOP 100 Top Innovator

German Solar Award 2014
Solar architecture and
urban development

we print by using 100% SOLAR POWER

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Specifications are subject to change without prior notice.

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