



GermanSolar
The Partner for Your Solar Lifetime!

AGRIVOLTAIC SERIES

AGRIVOLTAIC S O L A R P A N E L S

Dual Land Use Grow More Than Only Energy Grow Better Crops Bring new life to your farm by combining solar energy and agriculture. Spectral-selective solar glass transmits beneficial light to support healthier crops while generating clean, sustainable power.

FEATURES

Specifications: customized specifications.



*Growth-Enhancing
Colored Light*



*High transmittance
from
20 % - 60 %*



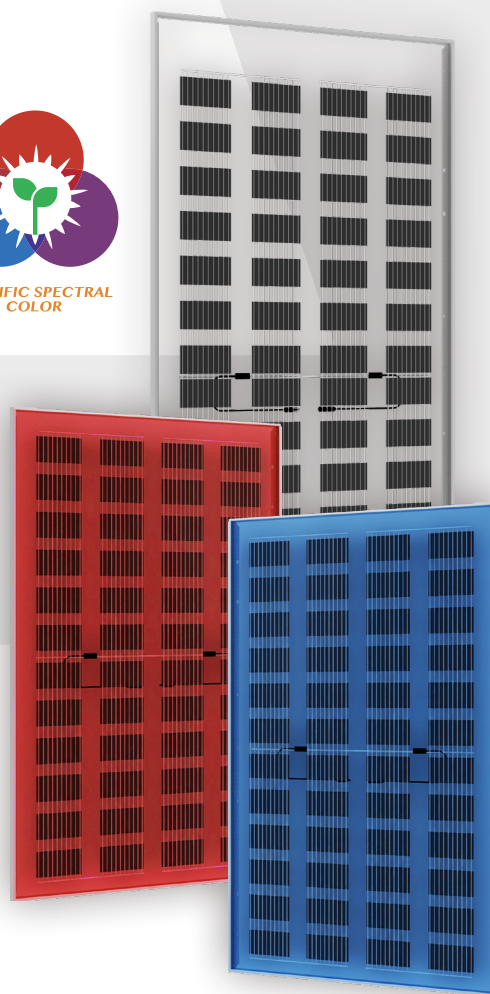
*SPECIFIC SPECTRAL
COLOR*



*Suitable
for farming, BIPV,
high transmittance
demands*



Customized size



APPLICATION SCENARIO



IEC 61730-1
IEC 61730-2, IEC 61215-1,
IEC 61215-2 and IEC 61215-3-1



IEC 61730-1
IEC 61730-2, IEC 61215-1,
IEC 61215-2 and IEC 61215-3-1



EN IEC 61730:
PHOTOVOLTAIK (PV) MODULE
SAFETY QUALIFICATION
2014/35/EU:
THE LOW VOLTAGE DIRECTIVE



ISO 9001
ISO 14001
ISO 45001
ISO 26000
ISO 19600

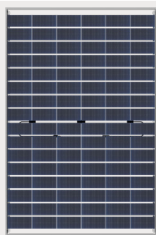
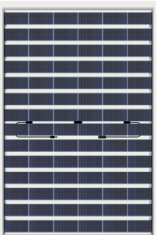
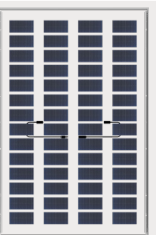
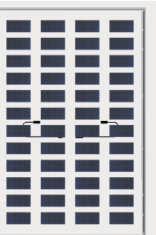


RoHS



Reach

ELECTRICAL DATA*

Light Transmittance (%)	20	30	40	50	60
Illustration					
Model	GSM10-Agri-365W-CG	GSM10-Agri-320W-CG	GSM10-Agri-275W-CG	GSM10-Agri-215W-CG	GSM10-Agri-180W-CG
Cell Number	6 X 16	6 X 14	4 X 18	4 X 14	4 X 12
Nominal Max. Power (P _{max}) *(W)	365	320	275	215	180
Open Circuit Voltage (V _{oc}) (V)	34.23	29.95	25.68	19.97	17.12
Short Circuit Current (I _{sc}) (A)	12.94	12.96	13.00	13.06	12.76
Max. Power Voltage (V _{mpp}) (V)	29.39	25.71	22.04	17.14	14.69
Max. Power Current (I _{mp}) (A)	12.42	12.45	12.48	12.54	12.25
Module Efficiency (%)	18.69	16.39	14.08	11.01	9.22
Power Tolerance (%)	± 3				
Power Temperature Coefficient γ	-0.33 % / °C				
Current Temperature Coefficient α	+0.04 % / °C				
Voltage Temperature Coefficient β	-0.27 % / °C				

*STC: Irradiance 1000 W / m², cell temperature 25 °C, AM = 1.5, Tolerance of P_{max} is within + / - 3 %.

BSTC**

Nominal Max. Power (P _{max}) *(W)	404	355	305	238	199
Open Circuit Voltage (V _{oc}) (V)	34.35	30.06	25.77	20.04	17.18
Short Circuit Current (I _{sc}) (A)	16.24	16.27	16.31	16.40	16.01
Max. Power Voltage (V _{mpp}) (V)	29.39	25.71	22.04	17.14	14.69
Max. Power Current (I _{mp}) (A)	13.76	13.79	13.83	13.90	13.57
NMOT (Nominal Module Operating Temperature) (°C)	41°C ± 3°C				

**BSTC: Front side irradiation 1000 W / m², back side reflection irradiation 135 W / m², AM = 1.5, ambient temperature 25 °C.

MECHANICAL DATA

Dimensions (mm)	1722 × 1134 × 30
Weight (kg)	24.2
Solar Cells (mm)	Mono 182 × 91
Front Glass	2.0 mm glass
Back Glass	2.0 mm glass
Junction Box	IP68, 3 diodes
Cables	1200mm in length (customizable) / UV resistant
Connectors	MC4 original / MC4 compatible

OPERATING CONDITIONS

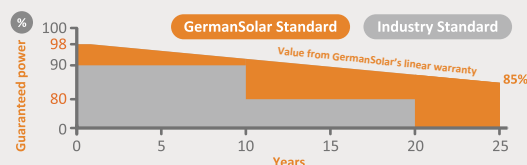
Max. System Voltage (V)	1500
Operating Temperature (°C)	-40°C ~ +85°C
Max. Series Fuse Rating (A)	30
Front Side Maximum Static Loading (Pa)	5400
Rear Side Maximum Static Loading (Pa)	2400

PACKAGING

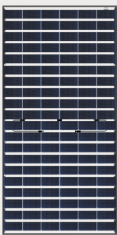
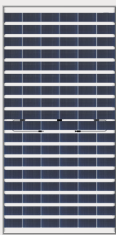
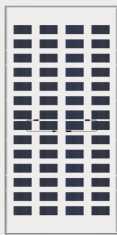
Panels Per Pallet (pcs)	36
Pallets Per Container (pcs)	26
Panels quantity per 40' container (pcs)	936

LINEAR PERFORMANCE WARRANTY

12 Years Product Warranty | 25 Years Performance Warranty



ELECTRICAL DATA *

Light Transmittance (%)	20	30	40	50	60
Illustration					
Model	GSM10-Agri-455W-AG	GSM10-Agri-415W-AG	GSM10-Agri-335W-AG	GSM10-Agri-275W-AG	GSM10-Agri-215W-AG
Cell Number	6 X 20	6 X 18	4 X 22	4 X 18	4 X 14
Nominal Max. Power (P _{max}) *(W)	455	415	335	275	215
Open Circuit Voltage (V _{oc}) (V)	42.79	38.51	31.38	25.68	19.97
Short Circuit Current (I _{sc}) (A)	12.90	13.08	12.95	13.00	13.06
Max. Power Voltage (V _{mpp}) (V)	36.73	33.06	26.94	22.04	17.14
Max. Power Current (I _{mp}) (A)	12.39	12.55	12.44	12.48	12.54
Module Efficiency (%)	17.61	16.06	12.96	10.64	8.32
Power Tolerance (%)	± 3				
Power Temperature Coefficient γ	-0.33 % / °C				
Current Temperature Coefficient α	+0.04 % / °C				
Voltage Temperature Coefficient β	-0.27 % / °C				

*STC: Irradiance 1000 W / m², cell temperature 25 °C, AM = 1.5, Tolerance of P_{max} is within + / - 3 %.

BSTC **

Nominal Max. Power (P _{max}) *(W)	504	460	371	305	238
Open Circuit Voltage (V _{oc}) (V)	42.94	38.65	31.49	25.77	20.04
Short Circuit Current (I _{sc}) (A)	16.19	16.41	16.26	16.31	16.40
Max. Power Voltage (V _{mpp}) (V)	36.73	33.06	26.94	22.04	17.14
Max. Power Current (I _{mp}) (A)	13.72	13.91	13.78	13.83	13.90
NMOT (Nominal Module Operating Temperature) (°C)	41°C ± 3°C				

**BSTC: Front side irradiation 1000 W / m², back side reflection irradiation 135 W / m², AM = 1.5, ambient temperature 25 °C.

MECHANICAL DATA

Dimensions (mm)	2279 x 1134 x 30
Weight (kg)	31.5
Solar Cells (mm)	Mono 182 x 91
Front Glass	2.0 mm glass
Back Glass	2.0 mm glass
Junction Box	IP68, 3 diodes
Cables	1200 mm in length (customizable) / UV resistant
Connectors	MC4 original / MC4 compatible

OPERATING CONDITIONS

Max. System Voltage (V)	1500
Operating Temperature (°C)	-40°C ~ +85°C
Max. Series Fuse Rating (A)	30
Front Side Maximum Static Loading (Pa)	5400
Rear Side Maximum Static Loading (Pa)	2400

PACKAGING

Panels Per Pallet (pcs)	36
Pallets Per Container (pcs)	20
Panels quantity per 40' container (pcs)	720

LINEAR PERFORMANCE WARRANTY

12 Years Product Warranty | 25 Years Performance Warranty

