



GermanSolar  
The Partner For Your Solar Lifetime

## AGRIVOLTAIC SERIES

# AGRIVOLTAIC SEMI-FLEX SOLAR PANELS

Bring a new life to your farm by combining solar panels and agriculture. Make your farm greener, healthier, and more earth-friendly.

### FEATURES

Specifications: customized specifications.



**High  
transmittance  
from 20 % - 60 %**



**Flexible**



**Waterproof  
and  
corrosion resistant**



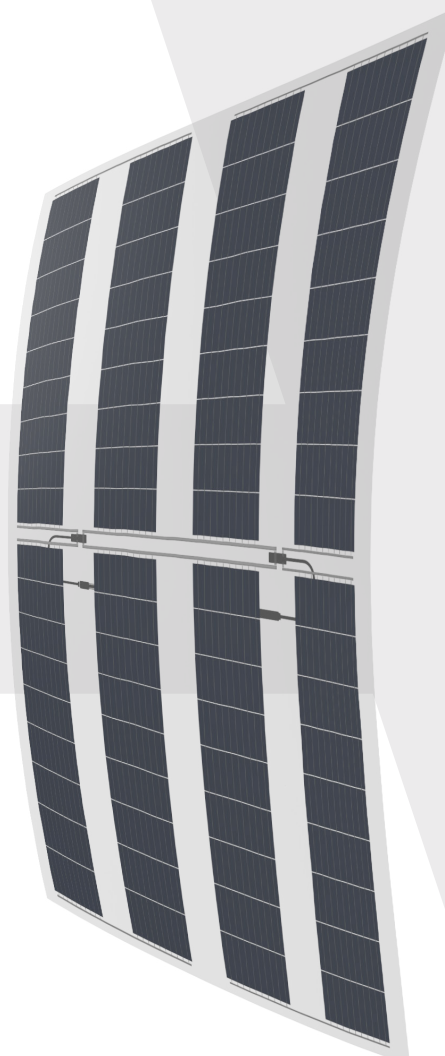
**Suitable  
for farming, BIPV,  
high transmittance  
demands**



**Reinforced  
composite Film**



**Customized size  
and  
transmittance rate**



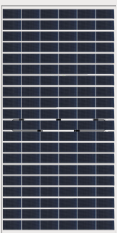
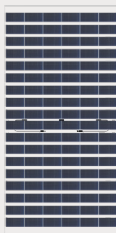
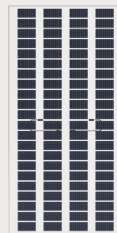
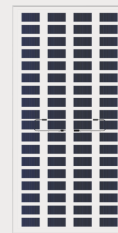
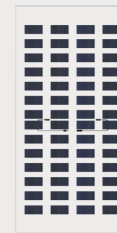
### APPLICATION SCENARIO



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**ELECTRICAL DATA \***

| Light Transmittance (%)                      | 20                                                                                | 30                                                                                | 40                                                                                | 50                                                                                  | 60                                                                                  |
|----------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Illustration                                 |  |  |  |  |  |
| Model                                        | GSM10-Agri-365W-CF                                                                | GSM10-Agri-320W-CF                                                                | GSM10-Agri-275W-CF                                                                | GSM10-Agri-215W-CF                                                                  | GSM10-Agri-180W-CF                                                                  |
| Cell Number                                  | 6 X 16                                                                            | 6 X 14                                                                            | 4 X 18                                                                            | 4 X 14                                                                              | 4 X 12                                                                              |
| Nominal Max. Power (P <sub>max</sub> ) *(W)  | 365                                                                               | 320                                                                               | 275                                                                               | 215                                                                                 | 180                                                                                 |
| Open Circuit Voltage (V <sub>oc</sub> ) (V)  | 34.23                                                                             | 29.95                                                                             | 25.68                                                                             | 19.97                                                                               | 17.12                                                                               |
| Short Circuit Current (I <sub>sc</sub> ) (A) | 12.94                                                                             | 12.96                                                                             | 13.00                                                                             | 13.06                                                                               | 12.76                                                                               |
| Max. Power Voltage (V <sub>mpp</sub> ) (V)   | 29.39                                                                             | 25.71                                                                             | 22.04                                                                             | 17.14                                                                               | 14.69                                                                               |
| Max. Power Current (I <sub>mp</sub> ) (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 / m<sup>2</sup>, cell temperature 25 °C, AM = 1.5, Tolerance of P<sub>max</sub> is within + / - 3 %.

**BSTC \*\***

|                                                  |            |       |       |       |       |
|--------------------------------------------------|------------|-------|-------|-------|-------|
| Nominal Max. Power (P <sub>max</sub> ) *(W)      | 404        | 355   | 305   | 238   | 199   |
| Open Circuit Voltage (V <sub>oc</sub> ) (V)      | 34.35      | 30.06 | 25.77 | 20.04 | 17.18 |
| Short Circuit Current (I <sub>sc</sub> ) (A)     | 16.24      | 16.27 | 16.31 | 16.40 | 16.01 |
| Max. Power Voltage (V <sub>mpp</sub> ) (V)       | 29.39      | 25.71 | 22.04 | 17.14 | 14.69 |
| Max. Power Current (I <sub>mp</sub> ) (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 / m<sup>2</sup>, back side reflection irradiation 135 W / m<sup>2</sup>, AM = 1.5, ambient temperature 25 °C.

**MECHANICAL DATA**

|                  |                                                 |
|------------------|-------------------------------------------------|
| Dimensions (mm)  | 1782 × 1134 × 1.8                               |
| Weight (kg)      | 6.0                                             |
| Solar Cells (mm) | Mono 182 x 91                                   |
| Junction Box     | IP68, 2 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) | 2400          |
| Rear Side Maximum Static Loading (Pa)  | 2400          |

**PACKAGING**

|                                         |     |
|-----------------------------------------|-----|
| Panels Per Pallet (pcs)                 | 70  |
| Pallets Per Container (pcs)             | 12  |
| Panels quantity per 40' container (pcs) | 840 |

**LINEAR PERFORMANCE WARRANTY**

12 Years Product Warranty | 25 Years Performance Warranty

