

Performance through Design

15% higher energy efficiency as compared to conventional panels from two innovative technologies :

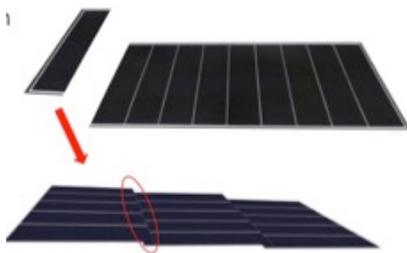
- **PERC Cell Technology (Passivated Emitter Rear Cell)**
- **Shingled Cell Module Design**

PERC cells absorb more light than conventional cells which improves module performance under low light conditions.

Shingled Cell Module Design :

The sliced cells connect to each other through conductive glue, while sub-strings are further connecting both in parallel and in serial.

- Increased active area
- Solid electrical connection
- Reduced ohmic resistance
- No reflective metal lines on the cells
- Increased efficiency
- 2°C lower solar module operation temperature enable longer panel life and better yield per power



Two bypass diodes on both sides of the module and the module design connection both in serial and in parallel limit the Hot Spot risks under partially shielded exposure conditions.

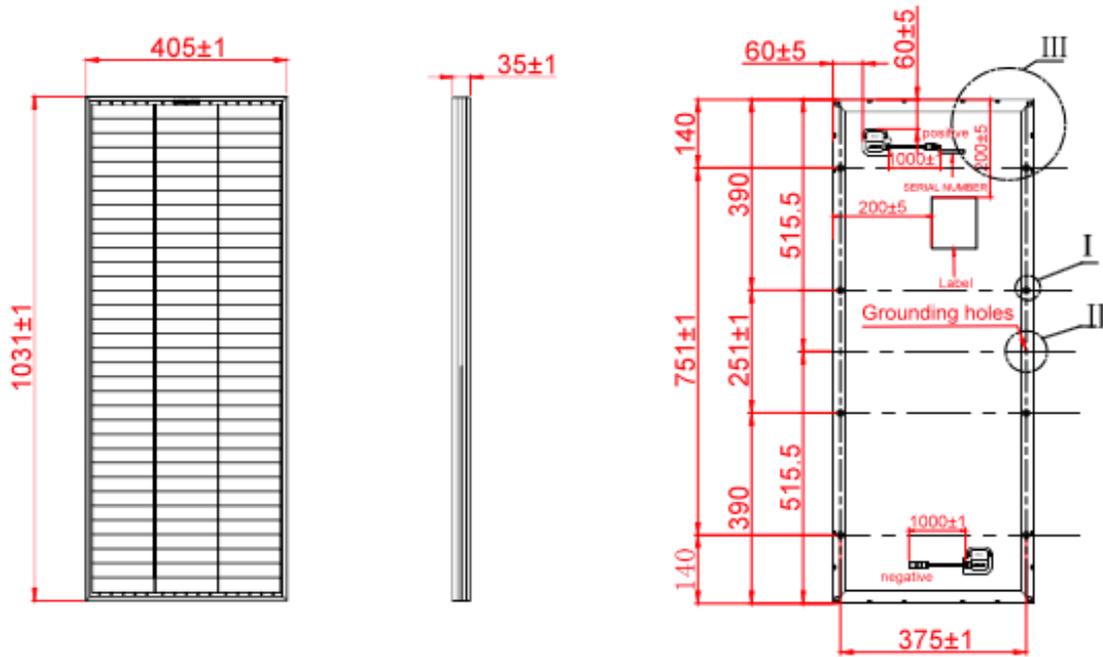


ON-GRID & OFF-GRID APPLICATIONS

Allow different power modules combination on one installation

75W 12V Solar Module

BLACKWELL New Back-Contact Range



Electrical Specifications

| | 12V |
|------------------------------|---------------|
| Model Type | GW-ES75A |
| Peak Power (Pmax) | 75W |
| Module Efficiency | 17,96% |
| Maximum Power Voltage (Vmp) | 18,2V |
| Maximum Power Current (Imp) | 4,13A |
| Open Circuit Voltage (Voc) | 22,5V |
| Short Circuit Current (Isc) | 4,28A |
| Power Tolerance | 0% / + 4,99% |
| Maximum System Voltage | 1000V |
| Nominal Operating Cell Temp. | 45 °C (+/- 2) |

Mechanical Specifications

Unite: mm

| | |
|-----------------|---|
| Cell type | Monocrystalline |
| Number of cells | 102 (34 x 3) |
| Weight | 4 |
| Dimensions | 1031 x 405 x 35 |
| Frame | black anodized aluminum |
| Junction Box | IP67 |
| Cables | 2 x 4.0 mm ² , cable length: 1000 mm |
| Connectors | MC4 compatible |

Temperature Coefficients

| | |
|---------|------------|
| Power | -0,40%/ °C |
| Voltage | -0,32%/ °C |
| Current | +0,05%/ °C |

Warranties & Certifications

| | |
|--------------|--|
| Warranties | 2 years product warranty, 10 years limited power warranty of 90% of the minimum specified power rating |
| Certificates | CE, TÜV |

The specifications on this documentation are subject to change without notice