

DATA SHEET

PLANUM SOLAR SYSTEM

Specifications - Building Integrated Photovaltaic Module



BREC47S-Rab *Bristile Roofing*

10 Cells *Monocrystalline*

47W *Power Output Peak*

17% *Maximum Efficiency*

0~+3% *Power Output Guarantee*

Solar cell: High efficiency multicrystalline solar cell. Even if under the weak light, the solar module can produce maximum power output.

Tempered glass: Anti-reflecting coating and high transmission rate glass increasing the power output and mechanical strength of solar module.

EVA and TPT: Using high quality EVA and TPT to prevent destroying and water.

Junction box: Multi-functional and water-proof junction box.

Good performance of preventing from atrocious weather such as wind and hails.

Resisting moisture and etching effectively, not effected by geology.

Certificates issued by international authorities:
ISO Quality Management system, CE, TUV (IEC61215 and IEC61730).

1. Mechanical Characteristics

Cell Size (mm)	156 x 156
No. of cells	10(2 x 5)
Module Size (mm)	823 x 340 x 61
Module Weight (KG)	11.2

2. Packaging Characteristics

Number of modules per pallet	22
Number of pallets per 20' /40' /40HC container	24/48/60
Packaging box dimensions (mm)	1450 x 900 x 560
Box Weight (KG)	290

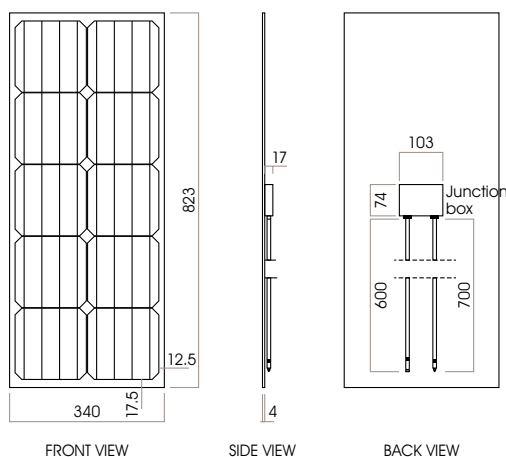
3. Construction Materials

Front Glass	3.2mm, Low Iron, Tempered Glass
Junction Box	IP 67 Rated (Black)
Output Cables	TUV 1x4mm ² , length: 600/700mm
Connector	Hengda PV-ST01
Encapsulation Material	EVA (0.45±0.03mm thickness)
Back Foil	Black TPT (0.32±0.03mm thickness)
Fixing Adhesive	Silicone Sealant (Black)

4. Temperature Coefficient

Power Tolerance	0~+3%
Temperature Coefficient of Pmax	(-0.41±0.05)%/°C
Temperature Coefficient of Voc	(-0.34±0.02)%/°C
Temperature Coefficient of Isc	(0.05±0.01) %/°C
NOTC (°C)	(47±2) °C

5. Module Diagram (without frame)



6. Operating Conditions

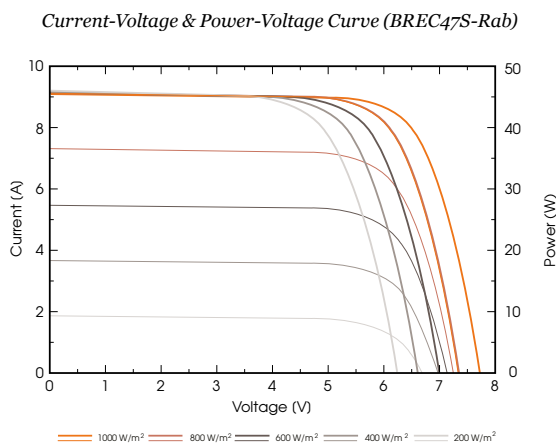
Max. system voltage	1000DVC (IEC)
Max. system fuse rating (A)	10
Operating temperature (°C)	-40~85

7. Electrical Parameters at Standard Test Conditions (STC)

Module type	BREC47S-Rab
Rated Maximum Power (Pmax/W)	47
Maximum Power Voltage (Vmp/V)	5,18
Open-circuit Voltage (Voc/V)	6.67
Maximum Power Current (Imp/A)	9,19
Short-circuit Current (Isc/A)	9.68
Module Efficiency (%)	17

STC: Irradiance 1000W/M² Module Temperature: 25°C AM=1.5

8. IV Curve



9. Certificates

