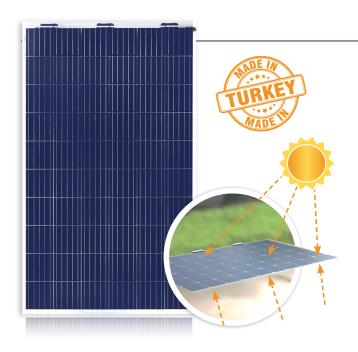


BIFACIAL **DUAL GLASS MODULE**

ULTRA POWER 330W MONO PERC+ BIFI GG1H-60



is a photovoltaic module producer based in Adıyaman, Turkey. Our automated production line of 135MW has been designed for the assembly of double glass modules, including automatic quality controls at all critical process steps. The new bifacial module developed by our accredited R&D Center maximizes the yield of any power plant at low cost. Another step to reduce LCOE for green energy producers!

The bifacial module can generate electricity from both sides. The backside uses the reflection of the ground depending on its Albedo factor and all potential diffused lights from the environment.

The module can be used in various applications like carport, fixed ground mount, trackers, rooftops, floating, sun breakers and more. The PV panel has been developed to resist to harsh environmental conditions beyond IEC standards (6X technology), such as salt mist.

MADE ACCORDING TO

IEC 61215, IEC 61730-1, IEC 61730-2, IEC Extended Tests DH6000, HF60, TC1200 TSE EN 61701 Salt Mist Corrosion Test - Severity 6 ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007











OPTIMIZED YIELD

315 - 330W Front Side (STC) 19.76% efficiency Bifacial boost up to 30%, depending on Albedo 6X Durability Technology Excellent low light performance Better performance in hot climate



EXTREME ROBUST DESIGN

Double-Glass Portable Frame Design Up to 50 years Service Time Perfect to reduce LCOE Fire Safe Class AA 100% PID free



GUARANTEED PERFORMANCE

84% power output after 30th year 12 years product warranty



INSTALLATION OPTIMIZATION

1500 V — Longer String Grounding free Reduce space Reduce BOS



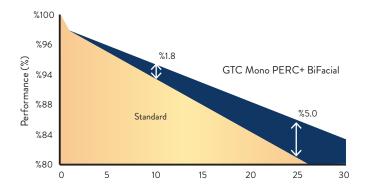
O&M COST REDUCTION

Portable frame design, no dust/snow collection Better self cleaning



SUPERIOR AESTHETICS

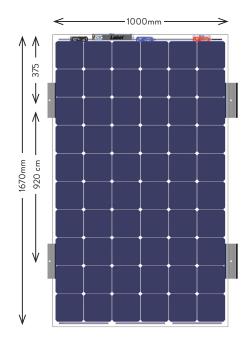
Glass/Glass portable frame Transparent on request



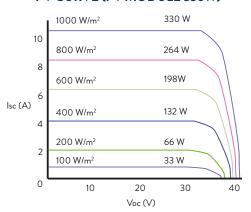


BIFACIAL DUAL GLASS MODULE

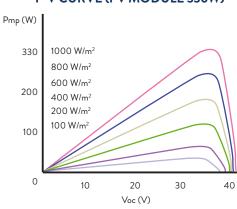
ULTRA POWER 330W MONO PERC+ BIFI GG1H-60



I-V CURVE (PV MODULE 330W)



P-V CURVE (PV MODULE 330W)



ELECTRICAL PERFORMANCE

| Max. Power P _{max} (W) | 315 | 320 | 325 | 330 |
|---------------------------------|-------|-------|-------|-------|
| Max. Power Voltage VMPP (V) | 33.34 | 33.65 | 33.97 | 34.20 |
| Max. Power Current IMPP (A) | 9.45 | 9.51 | 9.57 | 9.66 |
| Open-Circuit Voltage Voc (V) | 39.62 | 39.91 | 40.15 | 40.52 |
| Short-Circuit Current Isc (A) | 10.32 | 10.41 | 10.50 | 10.59 |
| Performance n _m (%) | 18.86 | 19.16 | 19.46 | 19.76 |

Standard Test Conditions (STC); 1000 W/m2, AM1.5, 25 °C, Power Tolerance (W) +/- 3%

BOOST FROM THE BACKSIDE

| . 70/ | Power (W) | 337 | 342 | 348 | 353 | |
|-------|-----------------|-----------------|-------|-------|-------|-------|
| _ | +7% | Performance (%) | 20.18 | 20.50 | 20.82 | 21.14 |
| +15% | Power (W) | 362 | 368 | 374 | 380 | |
| | Performance (%) | 21.69 | 22.04 | 22.38 | 22.72 | |

Bifacialty depends on Albedo

ELECTRICAL PARAMETERS AT NOMINAL OPERATING CELL TEMPERATURE (NOCT)

| Power Output PMAX (W) | 282 | 286 | 290 | 294 |
|-------------------------------|-------|-------|-------|-------|
| Max. Power Voltage VMMP (V) | 30.91 | 31.21 | 31.48 | 31.72 |
| Max. Power Current IMMP (A) | 7.60 | 7.64 | 7.69 | 7.76 |
| Open-Circuit Voltage Voc (V) | 36.75 | 37.02 | 37.24 | 37.58 |
| Short-Circuit Current Isc (A) | 8.29 | 8.36 | 8.44 | 8.51 |

NOCT: open-circuit module operation temperature at 800W/m2 irradiance, $20^{\circ}C$ ambient temperature, 1m/s wind speed

OPERATING CONDITIONS

| Operating Temperature | -40°C/+85°C |
|-------------------------|-------------|
| Max. System Voltage | 1500V |
| Max. Series Fuse Rating | 20A |
| Wind Load | 2400 Pa |
| Snow Load | 5400 Pa |

TEMP. CHARACTERISTICS

| Temp. coefficient PMAX | -0.38%/K |
|--------------------------------------|----------|
| Temp. coefficient Voc | -0.29%/K |
| Temp. coefficient Isc | 0.04%/K |
| Nominal Operating Temperature (NOCT) | 46°C |

MATERIAL SPECIFICATION

| Front Cover | 2mm ARC Low Iron Tempered Solar Glass |
|-----------------------|---|
| Cell Type | Bifacial Mono PERC |
| Cell Matrix | 60 Cells (6 x 10) |
| Lamination material | EVA |
| Back Glass | 2 mm ARC Low Iron Tempered Solar Glass |
| Junction Box | IP67 rated, 1500V Compatible, 3 Diodes |
| Cables and connectors | DC Cable 4 mm ² MC4 compatible, 1500 V Cable length 15cm male - 40cm female |
| Frame | Portable Frame |
| Module Dimensions | 1670 mm x 1000 mm x 5 mm (without J-box) |
| Module Weight | 20.1 kg |
| Module Per Box | 30 |
| Box per Truck | 30 |
| | |

ENGINEERED AND MADE IN TURKEY