



ABS-I20GWS-M10

485W – 505W

Topcon Half Cut PV Module

Glass/White Back Sheet-Silver Frame

505W

MAXIMUM POWER OUTPUT

+10W

OUTPUT POSITIVE TOLERANCE

Guaranteed 0~+10W positive tolerance ensures power output reliability.

23.3%

MAXIMUM EFFICIENCY



KEY FEATURES



LOW SYSTEM COST

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 23.34%.



EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).



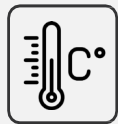
ADVANCED MODULE TECHNOLOGY

Highest reliability & enhanced crack tolerance MBB module



ALL-WEATHER TECHNOLOGY Optimal

Yields, whatever the weather, with low-light and temperature behaviour.



BETTER TEMPERATURE COEFFICIENT

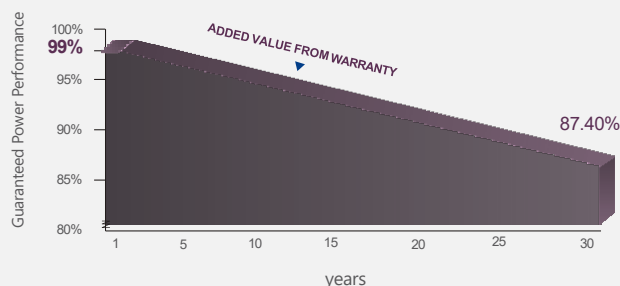
Lower temperature coefficient (Pmax): -0.30%/°C, increases energy yield in hot climate



ENDURING HIGH PERFORMANCE

Anti LID and Anti PID Technology. Under long-term production safety conditions, the limited power degradation caused by the PID effect is guaranteed.

LINEAR PERFORMANCE WARRANTY



Product warranty
30
Years

30-year Warranty for Extra Linear Power Output

Product warranty
12
Years

12-year Warranty for Materials and Processing
(1st year ≤ 1.0%, 2nd~30th years ≤ 0.40% / year)

THE IDEAL SOLUTION FOR



Residential



Commercial



Off-Grid



Utility

ADVANTAGES



MADE IN UAE

Premium products are 100% made in the Emirates.



A RELIABLE INVESTMENT

Products up to 725Wp, 30 years of performance warranty.

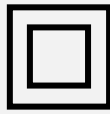


ENCOURAGING INNOVATION

Innovative, prestigious, European production technology

COMPREHENSIVE CERTIFICATES

IEC 61215 | IEC 61730 | IEC 61701 | IEC 62716 | IEC 60068-2-68



UL 61730 | MCS | CEC | ISO 9001 | ISO 14001 | ISO 45001

ABS-120GWS-M10-485-505W

ENGINEERING DRAWINGS & TECHNICAL PARAMETERS



BRONZE SOLAR

ELECTRICAL CHARACTERISTICS (STC/NOCT)

| Models | Maximum Rating Power (Pmax) (W) | | Open Circuit Voltage (Voc) (V) | | Maximum Power Voltage (Vmp) (V) | | Short Circuit Current (Isc) (A) | | Maximum Power Current (Imp) (A) | | Module Efficiency (EFF)(%) |
|--------------------|---------------------------------|-------|--------------------------------|-------|---------------------------------|-------|---------------------------------|-------|---------------------------------|-------|----------------------------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | |
| ABS-120GWS-M10-485 | 485 | 362.5 | 42.97 | 40.40 | 37.04 | 34.56 | 14.03 | 11.32 | 13.18 | 10.55 | 22.42% |
| ABS-120GWS-M10-490 | 490 | 366.3 | 43.11 | 40.53 | 37.16 | 34.67 | 14.08 | 11.36 | 13.29 | 10.64 | 22.65% |
| ABS-120GWS-M10-495 | 495 | 370.0 | 43.22 | 40.64 | 37.25 | 34.75 | 14.11 | 11.39 | 13.37 | 10.71 | 22.88% |
| ABS-120GWS-M10-500 | 500 | 373.7 | 43.31 | 40.72 | 37.33 | 34.83 | 14.13 | 11.40 | 13.45 | 10.77 | 23.11% |
| ABS-120GWS-M10-505 | 505 | 377.5 | 43.42 | 40.82 | 37.43 | 34.92 | 14.14 | 11.41 | 13.52 | 10.83 | 23.34% |

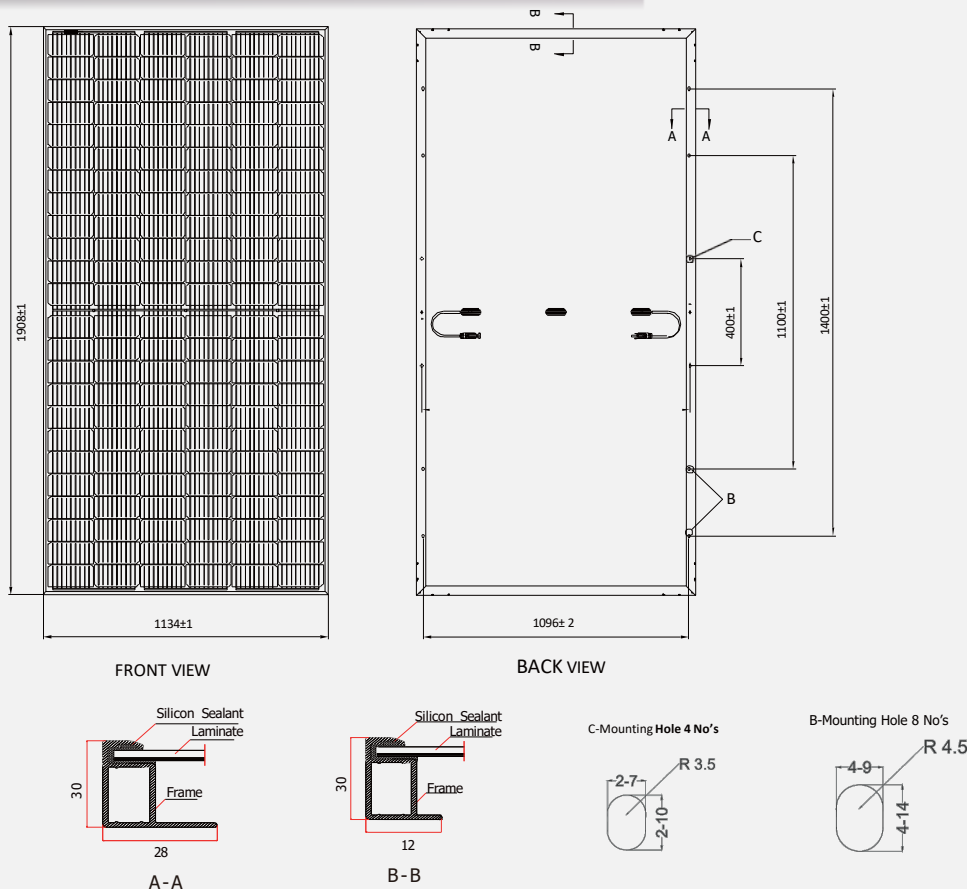
*Standard Test Condition (STC): Cell Temperature 25 °C, Irradiance 1000 W/m², AM 1.5, Nominal module operating temperature (NMOT): Air mass AM 1.5, Irradiance 800W/m², temperature 20°C, windspeed 1 m/s. Reduction in efficiency from 1000W/m² to 200W/m² at 25°C: 3.5 ± 2%.

*Values without tolerance are typical numbers. Measurement tolerance: ± 3%''

MECHANICAL DATA

| | |
|-----------------------|---|
| Solar Cell | Topcon 182.2 x 91.88 mm M10 ,16BB |
| No.of cells | 120 (6×20) |
| Dimensions | 1908 mm x 1134 mm x 30 mm (75.11" x 44.65" x 1.18" inch) |
| Weight | 23 kg / 50.71 lbs.(±3%) |
| Front Glass | 3.20 mm, High Transmission, Low Iron, Tempered ARC Glass |
| Cell Encapsulation | EPE(Expanded polyethylene) & EVA (Ethylene-Vinyl-Acetate) |
| Back Sheet | White Back sheet |
| Frame | Silver Anodized Aluminum Alloy Type 6005T6 , Silver Color |
| Junction Box | IP68, 1500VDC, 3 Bypass Diodes |
| Connectors Type | IP68 MC4 Compatible |
| Cable | 400mm or 1300 mm, 4mm ² |
| Package Configuration | 36 pcs Per Pallet, 864 pcs per 40' FT container (Two pallets=One stack) |

DIMENSIONS OF PV MODULE (mm)



OPERATING CONDITION

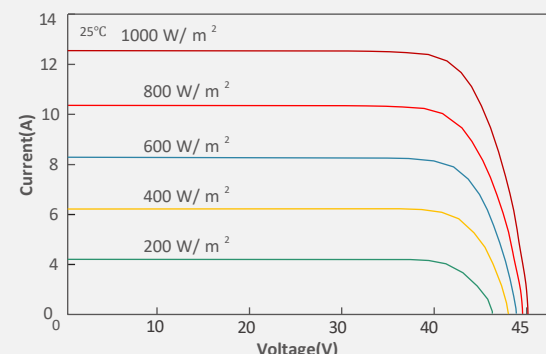
| | |
|--------------------------|--------------|
| Mechanical Load | 5400 Pa |
| Maximum System Voltage | 1500VDC |
| Series Fuse Rating | 25 A |
| Operating Temperature | -40 to 85 °C |
| Safety application class | Class II |
| Fire Rating | Class C |

TEMPERATURE CHARACTERISTICS

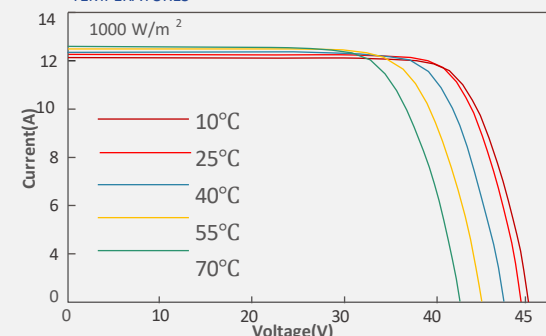
| | |
|--------------------------------------|--------------|
| Nominal Module Operating Temperature | 43°C ± 2°C |
| Temperature Coefficient of Isc | +0.05 % / °C |
| Temperature Coefficient of Voc | -0.25 % / °C |
| Temperature Coefficient of Pmax | -0.30 % / °C |

IV-CURVES

CURRENT-VOLTAGE CURVE UNDER DIFFERENT IRRADIANCE



CURRENT-VOLTAGE CURVE UNDER DIFFERENT WORKING TEMPERATURES



The Graphs are for reference purpose only. Please consult Abundance technical team for further clarifications.