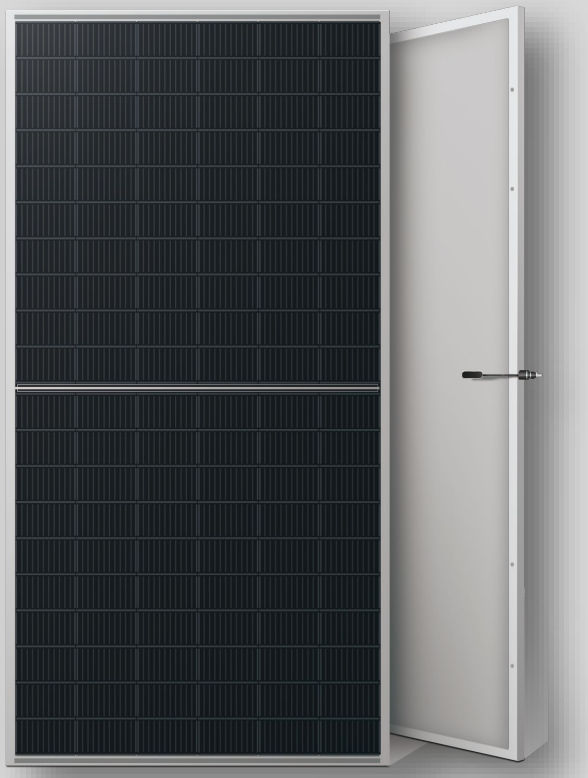
ABUNDANCE
RENEWABLE, SUSTAINABLE, CONSCIOUS

ABS-120GWS-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).

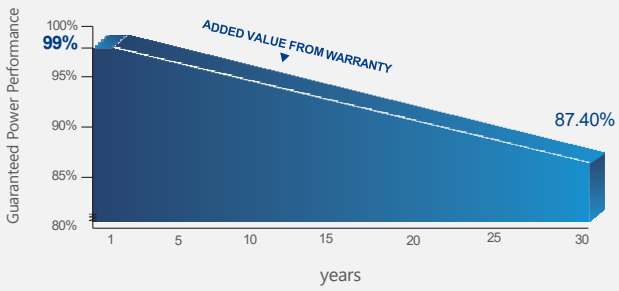
ADVANCED MODULE TECHNOLOGY
Highest reliability & enhanced crack tolerance MBB module

ALL-WEATHER TECHNOLOGY Optimal
Yields, whatever the weather, with low-light and temperature behaviour.

BETTER TEMPERTURE 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

COMPREHENSIVE CERTIFICATES

IEC 61215 | IEC 61730 | IEC 61701 | IEC 62716

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

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

Address: Abundance Solar Panels Industries – LLC Plot No 7-8, KHIA5, KEZAD, Abu Dhabi, UAE

ABS-120GWS-M10-485-505W

ENGINEERING DRAWINGS & TECHNICAL PARAMETERS

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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, 4mm²
Package Configuration	36 pcs Per Pallet, 864 pcs per 40' FT container (Two pallets=One stack)

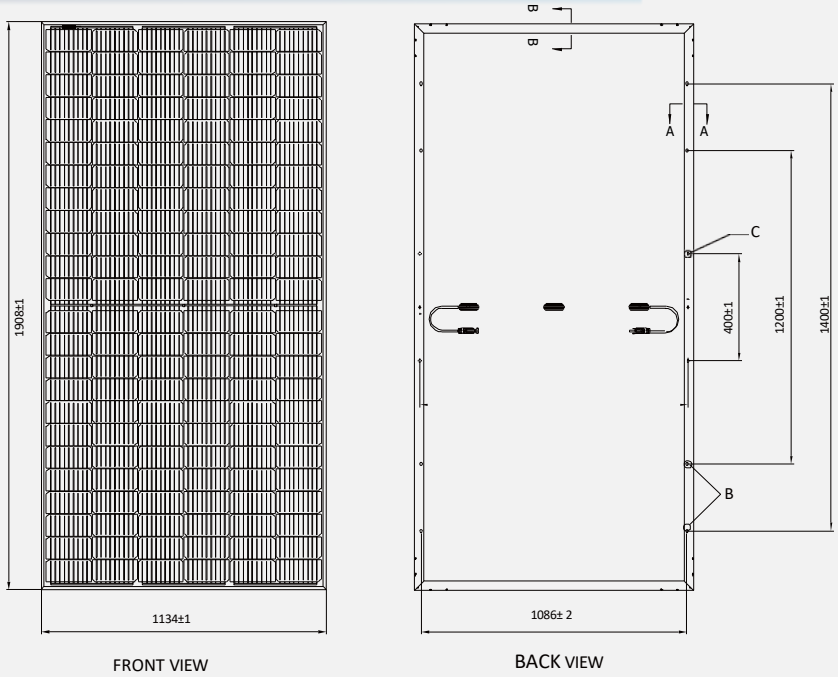
OPERATING CONDITION

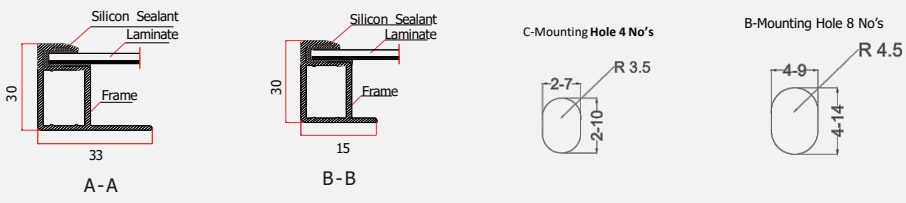
Mechanical Load	5400 Pa
Maximum System Voltage	1500VDC
Series Fuse Rating	25 A
Operating Temperature	-40 to 85 °C
Safety application class	Class II
Fire Rating	Class C

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

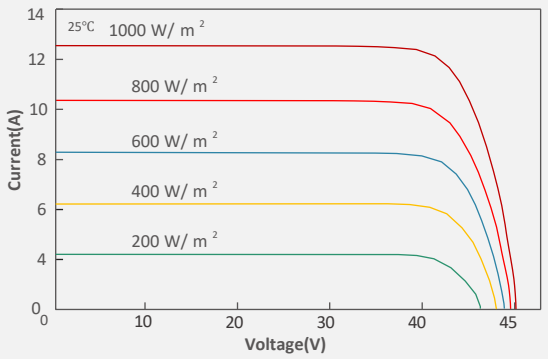
DIMENSIONS OF PV MODULE (mm)



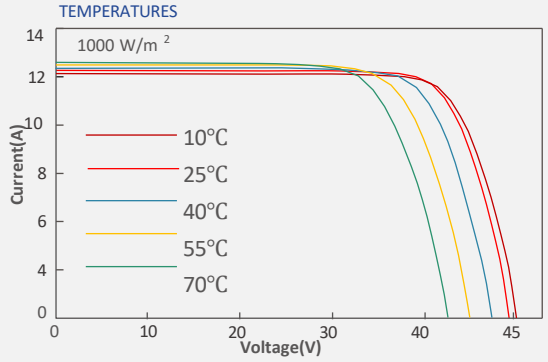


IV-CURVES

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.

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