

## ABS-132GWS-M10 535W – 555W

## Topcon Half Cut PV Module

Glass/White Back Sheet-Silver Frame



MAXIMUM POWER OUTPUT



**OUTPUT POSITIVE TOLERANCE** 

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

23.4%

**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 23.43%.



#### **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**

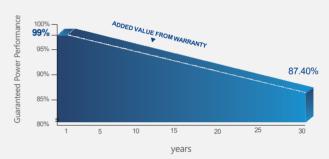
Lower temperature coefficient (Pmax): -0.30%/°C, increases energy yield in hot climate



### **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



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**







A RELIABLE INVESTMENT

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



ENCOURAGING INNOVATION

Innovative, prestigious, European production technology

# ABS-132GWS-M10-535-555W

### ENGINEERING DRAWINGS & TECHNICAL PARAMETERS



### **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-132GWS-M10-535	535	399.9	47.26	44.43	40.74	38.01	14.03	11.32	13.18	10.55	22.58%
ABS-132GWS-M10-540	540	403.6	47.42	44.59	40.88	38.14	14.08	11.36	13.29	10.64	22.80%
ABS-132GWS-M10-545	545	407.4	47.55	44.71	40.98	38.23	14.11	11.39	13.37	10.71	23.01%
ABS-132GWS-M10-550	550	411.1	47.64	44.79	41.07	38.32	14.13	11.40	13.45	10.77	23.22%
ABS-132GWS-M10-555	555	414.9	47.76	44.90	41.18	38.42	14.14	11.41	13.52	10.83	23.43%

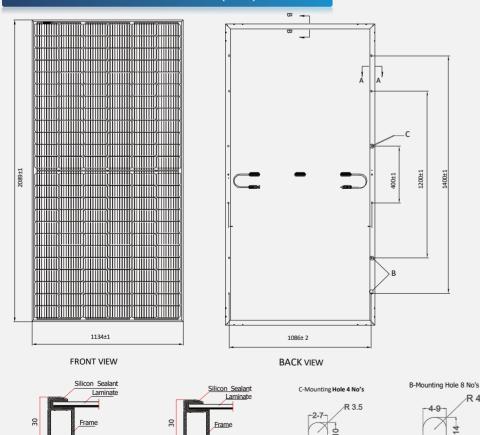
<sup>\*</sup>Standard Test Condition (STC): Cell Temperature 25 °C, Irradiance 1000 W/m², AM 1.5, Nominal module operating temperature (NMOT): Air mass AM 15, Irradiance 800W/m², temperature 20°C, windspeed 1 m/s. Reduction in efficiency from 1000W/m² to 200W/m² at 25°C: 3.5 ± 2%.

\*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	132 (6×22)				
Dimensions	2089 mm x 1134 mm x 30 mm (82.24" x 44.65" x 1.18" inch)				
Weight	25 kg / 55.11 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 <sup>2</sup>				
Package Configuration	36 pcs Per Pallet, 792 pcs per 40' FT container ( Two pallets=One				
i ackage Configuration	stack)				

### DIMENSIONS OF PV MODULE (mm)



### **OPERATING CONDITION**

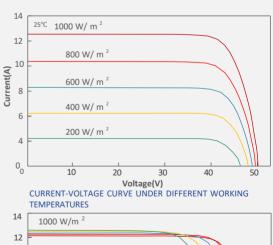
Mechanical Load	5400 Pa			
Maximum System Voltage	1500VDC			
Series Fuse Rating	25 A			
Operating Temperature	-40 to 85 °C			
Safety application class	Class II			
Fire Rating	Class C			

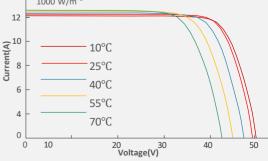
### **TEMPERATURE CHARACTERISTICS**

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





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

15

B-B

33

A-A