

ABS-132GGS-M10 535W - 555W Topcon Half Cut PV Module

Glass/Glass-Silver Frame



MAXIMUM POWER OUTPUT

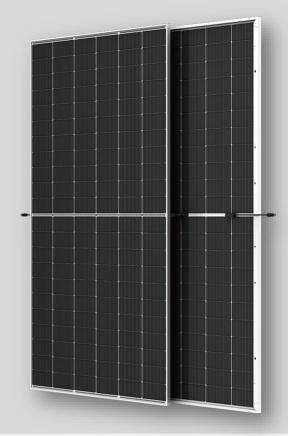


**OUTPUT POSITIVE TOLERANCE** 

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

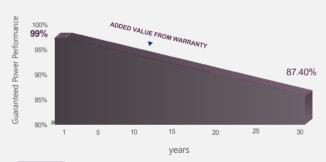
Lower temperature coefficient (Pmax): -0.30%/°C, increases energy yield in hot climate



### **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



30 Years

30-year Warranty for Extra Linear Power Output



12-year Warranty for Materials and Processing  $(1^{st} \text{ year} \le 1.0\%, 2^{nd} \sim 30^{th} \text{ years} \le 0.40\% / \text{ year})$ 

# HE IDEAL SOLUTION FOR









Residential

Commercial

Off-Grid

Utility

# **COMPREHENSIVE CERTIFICATES**

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











UL 61730 | MCS | 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-132GGS-M10-535-555W



### **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-132GGS-M10-535	535	399.9	47.26	44.43	40.74	38.01	14.03	11.32	13.18	10.55	22.58%
ABS-132GGS-M10-540	540	403.6	47.42	44.59	40.88	38.14	14.08	11.36	13.29	10.64	22.80%
ABS-132GGS-M10-545	545	407.4	47.55	44.71	40.98	38.23	14.11	11.39	13.37	10.71	23.01%
ABS-132GGS-M10-550	550	411.1	47.64	44.79	41.07	38.32	14.13	11.40	13.45	10.77	23.22%
ABS-132GGS-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 15, 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:  $3.5 \pm 2\%$ . Values without tolerance are typical numbers. Measurement tolerance: ± 3%

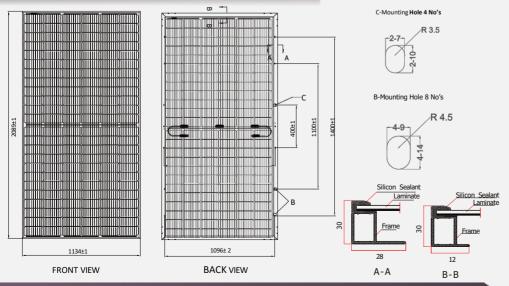
### BI-FACIAL OUTPUT-BACKSIDE POWER GAIN

Models		ABS-132GGS-M10- 535	ABS-132GGS-M10- 540	ABS-132GGS-M10- 545	ABS-132GGS-M10- 550	ABS-132GGS-M10- 555
10%	Power	589	594	600	605	611
10%	Eff	24.84%	25.07%	25.31%	25.54%	25.77%
15%	Power	615	621	627	633	638
13/6	Eff	25.97%	26.21%	26.46%	26.70%	26.94%
20%	Power	642	648	654	660	666
20%	Eff	27.10%	27.35%	27.61%	27.86%	28.11%
25%	Power	669	675	681	688	694
	Eff	28.23%	28.49%	28.76%	29.02%	29.29%

### 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	29 kg / 63.93 lbs.(±3%)			
Front Glass	2.0 mm, High Transmission, Low Iron, Tempered ARC Glass			
Cell Encapsulation	EPE(Expanded polyethylene) & EVA (Ethylene-Vinyl-Acetate)			
Back Glass	2.0 mm Semi Tempered Glass with Glaze			
Frame	Silver Anodized Aluminum Alloy Type 6005T6, Silver Color			
Junction Box	IP68, I500VDC, 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 stack )			

# DIMENSIONS OF PV MODULE (mm)



### **OPERATING CONDITION**

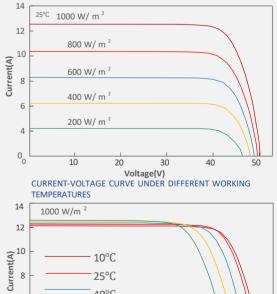
Mechanical Load	5400 Pa
Maximum System Voltage	I500VDC
Series Fuse Rating	25 A
Operating Temperature	-40 to 85 °C
Safety application class	Class II
Fire Rating	Class C

### 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



40°C

55°C 70°C

0

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

20 30 Voltage(V)