

ABS-I08GTS-M10

435W – 455W

Topcon Half Cut PV Module

Glass/Transparent Back sheet-Silver Frame

**455W** 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 23.30%.



### 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

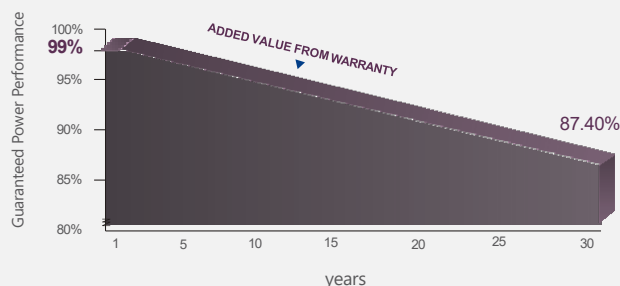
Lower temperature coefficient (Pmax):  
-0.30%/°C, increases energy yield in hot climate



### 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  
(1<sup>st</sup> year ≤ 1.0%, 2<sup>nd</sup>~30<sup>th</sup> 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.



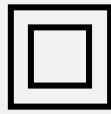
**A RELIABLE INVESTMENT**  
Products up to 725Wp, 30 years of performance warranty.



**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-108GTS-M10-435-455W

## 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-108GTS-M10-435	435	325.2	38.67	36.36	33.33	31.10	14.03	11.32	13.18	10.55	22.28%
ABS-108GTS-M10-440	440	328.9	38.80	36.48	33.45	31.21	14.08	11.36	13.29	10.64	22.53%
ABS-108GTS-M10-445	445	332.6	38.90	36.57	33.53	31.28	14.11	11.39	13.37	10.71	22.79%
ABS-108GTS-M10-450	450	336.4	38.98	36.65	33.60	31.35	14.13	11.40	13.45	10.77	23.04%
ABS-108GTS-M10-455	455	340.1	39.08	36.74	33.69	31.43	14.14	11.41	13.52	10.83	23.30%

\*Standard Test Condition (STC): Cell Temperature 25 °C, Irradiance 1000 W/m<sup>2</sup>, AM 1.5, Nominal module operating temperature (NMOT): Air mass AM 1.5, Irradiance 800W/m<sup>2</sup>, temperature 20°C, windspeed 1 m/s. Reduction in efficiency from 1000W/m<sup>2</sup> to 200W/m<sup>2</sup> at 25°C: 3.5 ± 2%  
\*Values without tolerance are typical numbers. Measurement tolerance: ± 3%

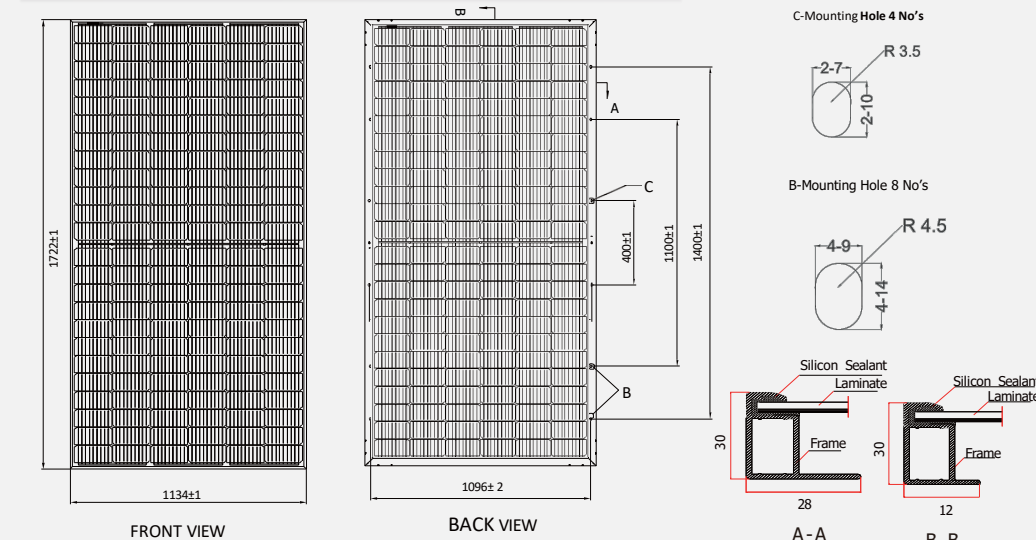
### BI-FACIAL OUTPUT-BACKSIDE POWER GAIN

Models		ABS-108GTS-M10-435	ABS-108GTS-M10-440	ABS-108GTS-M10-445	ABS-108GTS-M10-450	ABS-108GTS-M10-455
10%	Power	479	484	490	495	501
	Eff	24.50%	24.79%	25.07%	25.35%	25.63%
15%	Power	500	506	512	518	523
	Eff	25.62%	25.91%	26.21%	26.50%	26.80%
20%	Power	522	528	534	540	546
	Eff	26.73%	27.04%	27.35%	27.65%	27.96%
25%	Power	544	550	556	563	569
	Eff	27.85%	28.17%	28.49%	28.81%	29.13%

### MECHANICAL DATA

Solar Cell	Topcon 182.2 × 91.88 mm M10 ,16BB
No.of cells	108 (6×18)
Dimensions	1722 mm × 1134 mm × 30 mm ( 67.80" × 44.65" × 1.18" inch)
Weight	21 kg / 46.30 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	Transparent 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, 936 pcs per 40' FT container ( Two pallets=One stack )

### DIMENSIONS OF PV MODULE (mm)



### OPERATING CONDITION

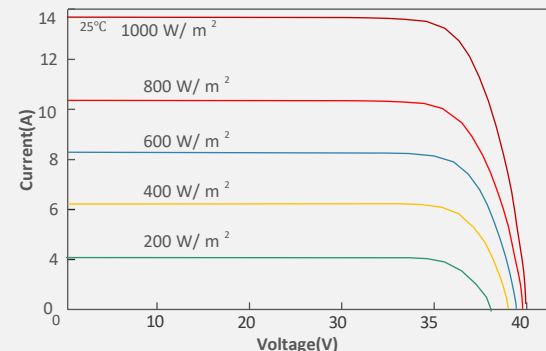
Mechanical Load	5400 Pa
Maximum System Voltage	1500VDC
Series Fuse Rating	25 A
Operating Temperature	-40 to 85 °C
Safety application class	Class II
Fire Rating	Class C

### TEMPERATURE CHARACTERISTICS

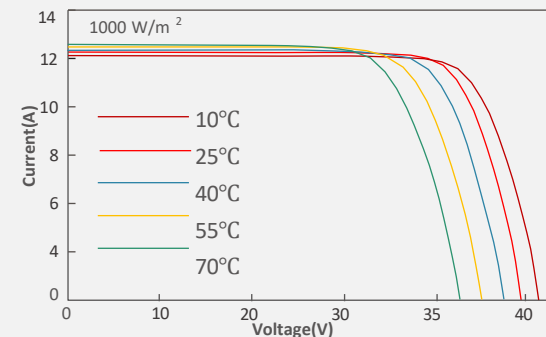
Nominal Module Operating Temperature	43°C ± 2°C
Temperature Coefficient of Isc	+0.05 % / °C
Temperature Coefficient of Voc	-0.25 % / °C
Temperature Coefficient of Pmax	-0.30 % / °C

### 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.