

ABS-132GGS-G12R

610W – 630W

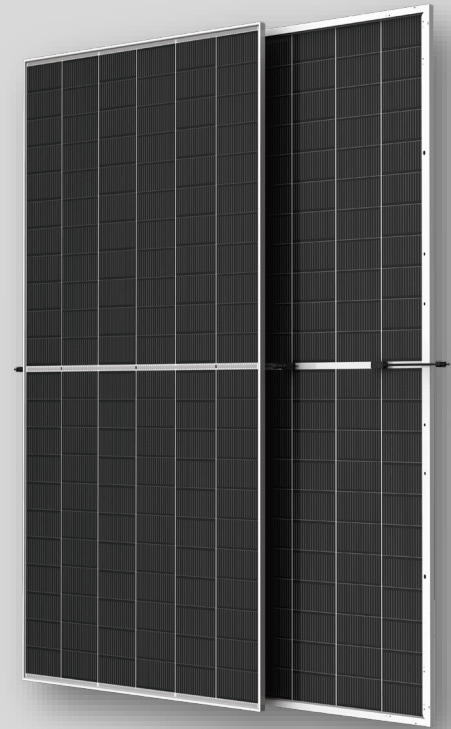
Topcon Half Cut PV Module

Glass/Glass-Silver Frame

630W 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).



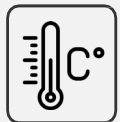
ADVANCED MODULE TECHNOLOGY

Highest reliability & enhanced crack tolerance MBB module



ALL-WEATHER TECHNOLOGY Optimal

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



BETTER TEMPERATURE COEFFICIENT

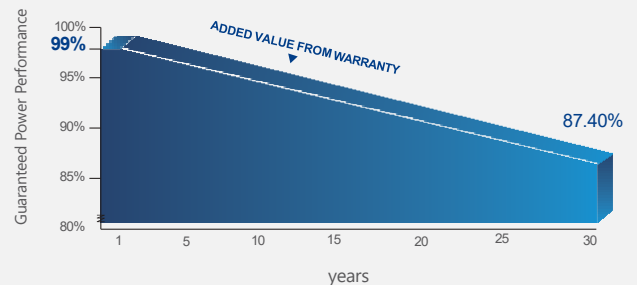
Lower temperature coefficient (Pmax):
-0.30%/°C, increases energy yield in hot climate



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



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 1709 | 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

ABS-132GGS-G12R-610-630W

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-132GGS-G12R-610	610	456.0	47.09	44.27	40.60	37.88	15.67	12.65	15.09	12.08	22.56%
ABS-132GGS-G12R-615	615	459.7	47.20	44.38	40.69	37.96	15.70	12.67	15.18	12.16	22.75%
ABS-132GGS-G12R-620	620	463.4	47.30	44.47	40.77	38.04	15.75	12.71	15.27	12.23	22.93%
ABS-132GGS-G12R-625	625	467.2	47.41	44.58	40.87	38.13	15.78	12.73	15.35	12.29	23.12%
ABS-132GGS-G12R-630	630	470.9	47.47	44.63	40.92	38.18	15.81	12.76	15.40	12.33	23.30%

*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%''

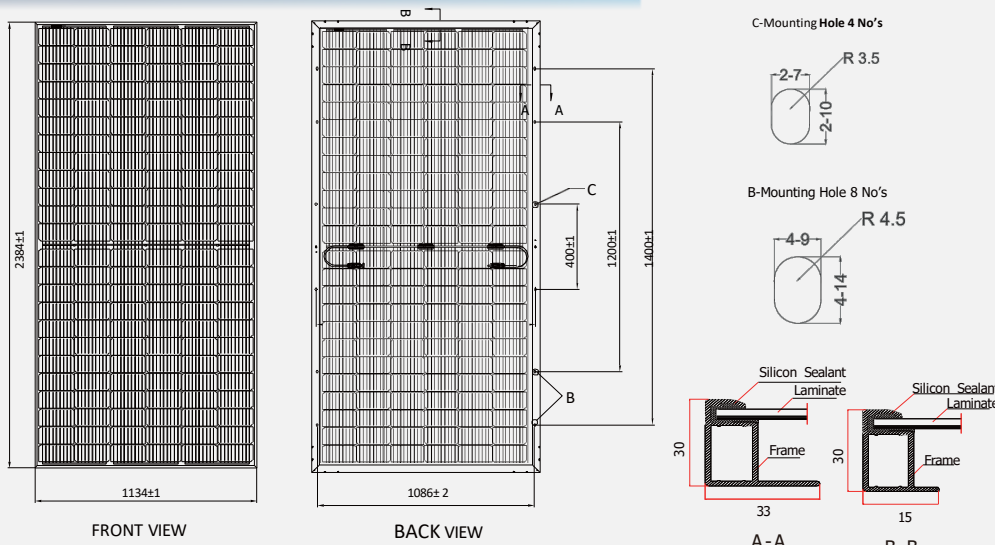
BI-FACIAL OUTPUT-BACKSIDE POWER GAIN

Models		ABS-132GGS-G12R-610	ABS-132GGS-G12R-615	ABS-132GGS-G12R-620	ABS-132GGS-G12R-625	ABS-132GGS-G12R-630
10%	Power	671	677	682	688	693
	Eff	24.82%	25.02%	25.23%	25.43%	25.63%
15%	Power	702	707	713	719	725
	Eff	25.95%	26.16%	26.37%	26.59%	26.80%
20%	Power	732	738	744	750	756
	Eff	27.08%	27.30%	27.52%	27.74%	27.96%
25%	Power	763	769	775	781	788
	Eff	28.20%	28.44%	28.67%	28.90%	29.13%

MECHANICAL DATA

Solar Cell	Topcon 182 x 105 mm G12R, 16BB
No. of cells	132 (6x22)
Dimensions	2384 mm x 1134 mm x 30 mm (93.85" x 44.64" x 1.18" inch)
Weight	33 kg / 72.75 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, 1500VDC, 3 Bypass Diodes
Connectors Type	IP68 MC4 Compatible
Cable	400mm or 1300 mm, 4mm ²
Package Configuration	36 pcs Per Pallet, 720 pcs per 40' FT container (Two pallets=One stack)

DIMENSIONS OF PV MODULE (mm)



OPERATING CONDITION

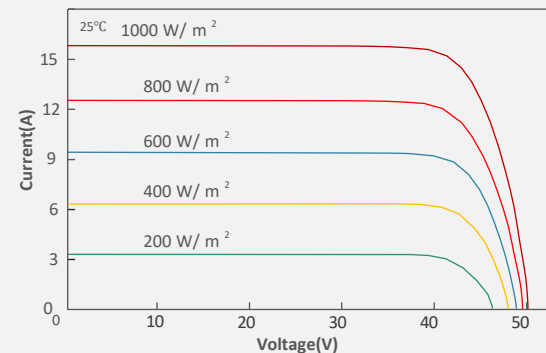
Mechanical Load	5400 Pa
Maximum System Voltage	1500VDC
Series Fuse Rating	30 A
Operating Temperature	-40 to 85 °C
Safety application class	Class II
Fire Rating	Class C

TEMPERATURE CHARACTERISTICS

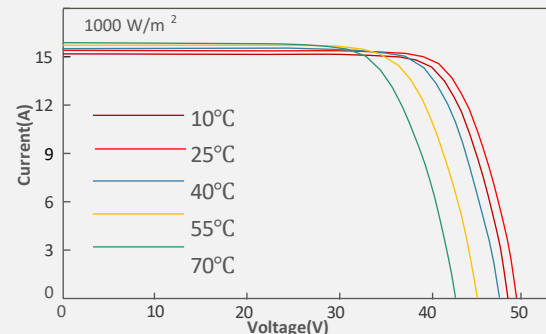
Nominal Module Operating Temperature	43°C ± 2°C
Temperature Coefficient of Isc	+0.05 % / °C
Temperature Coefficient of Voc	-0.25 % / °C
Temperature Coefficient of Pmax	-0.30 % / °C

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.