



ABS-I44GGB-M10

585W – 610W

Topcon Half Cut PV Module

Glass/Glass-Black Frame

610W

MAXIMUM POWER OUTPUT

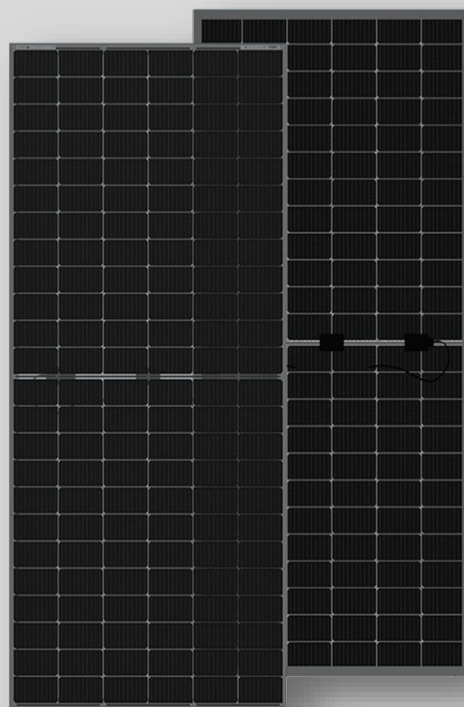
+10W

OUTPUT POSITIVE TOLERANCE

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

23.6%

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 23.61%.



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

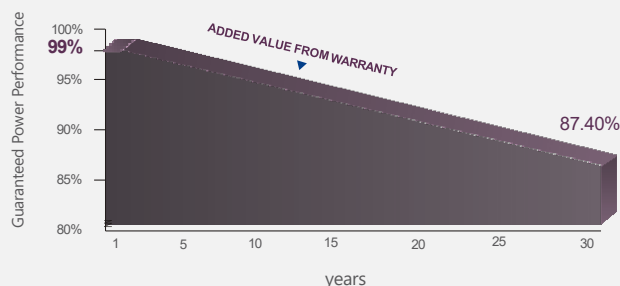
Lower temperature coefficient (Pmax): -0.30%/°C, increases energy yield in hot climate



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
(1st year ≤ 1.0%, 2nd~30th years ≤ 0.40% / year)

THE IDEAL SOLUTION FOR



Residential



Commercial



Off-Grid



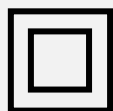
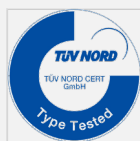
Utility

COMPREHENSIVE CERTIFICATES

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



CQC



UL 61730 | MCS | 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

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-144GGB-M10-585	585	437.3	51.62	48.53	44.50	41.52	14.04	11.33	13.22	10.59	22.65%
ABS-144GGB-M10-590	590	441.0	51.73	48.64	44.60	41.61	14.08	11.36	13.29	10.64	22.84%
ABS-144GGB-M10-595	595	444.8	51.87	48.77	44.70	41.71	14.11	11.39	13.37	10.71	23.03%
ABS-144GGB-M10-600	600	448.5	51.97	48.86	44.80	41.80	14.13	11.40	13.45	10.77	23.23%
ABS-144GGB-M10-605	605	452.2	52.11	48.99	44.92	41.91	14.14	11.41	13.52	10.83	23.42%
ABS-144GGB-M10-610	610	456.0	52.24	49.12	45.03	42.01	14.17	11.43	13.59	10.88	23.61%

*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-144GGB-M10-585	ABS-144GGB-M10-590	ABS-144GGB-M10-595	ABS-144GGB-M10-600	ABS-144GGB-M10-605	ABS-144GGB-M10-610
10%	Power	644	649	655	660	666	671
	Eff	24.91%	25.12%	25.34%	25.55%	25.76%	25.98%
15%	Power	673	679	684	690	696	702
	Eff	26.04%	26.27%	26.49%	26.71%	26.93%	27.16%
20%	Power	702	708	714	720	726	732
	Eff	27.18%	27.41%	27.64%	27.87%	28.10%	28.34%
25%	Power	731	738	744	750	756	763
	Eff	28.31%	28.55%	28.79%	29.03%	29.28%	29.52%

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

MECHANICAL DATA

Solar Cell	Topcon 182.2 x 91.88 mm M10 ,16BB
No.of cells	144 (6x24)
Dimensions	2278 mm x 1134 mm x 30 mm (89.69" x 44.65" x 1.18" inch)
Weight	32 kg / 70.54 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	Black Anodized Aluminum Alloy Type 6005T6 , Black 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)

