

N-type TOPCon Mono

595-620W

AS595-620M10-144 Full Black

Full Black Half-Cell PV Module



NOPCON



N-TYPE TOPCON module could increase power generation by 3%+ per watt compared with PERC



HIGHER power output
Bifacial module back-side power increase 5-25%



COMPATIBLE with mainstream trackers
effective product for utility power plant



Lower degradation rate, **BETTER** shading tolerance
First-year $\leq 1\%$, 2-30 year $\leq 0.4\%$



LOWER Temp. COEFFICIENT
More power generation under high-temperature

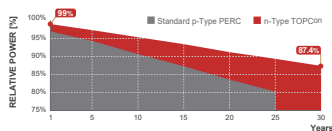


30 Year
Warranty for Solar Linear Power Output

15 Year
Warranty for Materials and Processing

0.4%
Annual degradation

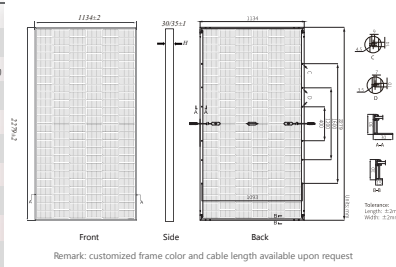
LINEAR PERFORMANCE WARRANTY



AS595-620M10-144 Full Black Half-Cell PV Module

MECHANICAL SPECIFICATION

Cell	N-type monocrystalline
No. of cells	144(6x24)
Cable Length	$\pm 300\text{mm}/\pm 1200\text{mm}$ (length can be customized)
Cable Cross Section Size	4mm ² (IEC)
Junction Box	IP68, 3 diodes
Connector	MC4 Compatible
Weight	32.3kgs $\pm 3\%$
Cells Type	Mono 182x91mm
Dimension(LxWxT)	2279 $\pm 2\text{mm}$ x 1342 $\pm 2\text{mm}$ x 30/35 $\pm 1\text{mm}$
Packaging	36pcs/pallet, 720pcs/40HQ (30mm) 31pcs/pallet, 620pcs/40HQ (35mm)



Remark: customized frame color and cable length available upon request

ELECTRICAL CHARACTERISTICS

STC AM1.5 1000W/m² 25 °C NOCT AM1.5 800W/m² 20 °C 1m/s Test uncertainty for Pmax $\pm 3\%$

Module Type	AS595M10-144	AS600M10-144	AS605M10-144	AS610M10-144	AS615M10-144	AS620M10-144
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	595	449	600	453	605	553
Open Circuit Voltage(Voc/V)	53.41	48.82	53.53	48.88	53.65	48.94
Short Circuit Current(Isc/A)	13.96	11.85	14.02	11.91	14.08	11.97
Voltage at Maximum Power(Vmp/V)	44.46	40.16	44.66	40.29	44.86	40.42
Current at Maximum Power(Imp/A)	13.38	11.16	13.43	11.22	13.48	11.28
Module Efficiency(%)	23.02	23.21	23.40	23.60	23.80	24.0

ELECTRICAL CHARACTERISTICS

OPERATING PARAMETERS

5%	Maximum power (W)	625	630	635	641	646	651	Maximum System Voltage	1500VDC
	Module efficiency STC (%)	24.2%	24.4%	24.6%	24.8%	25.0%	25.2%	Operating Temperature	-40 °C ~ +85 °C
15%	Maximum power (Total)	684	690	696	702	707	713	Maximum Series Fuse	30A
	Module efficiency STC (%)	26.5%	26.7%	26.9%	27.2%	27.4%	27.6%	Maximum StaticLoad,Front	5400Pa(112lb/ft ²)
25%	Maximum power (Total)	744	750	756	763	769	775	Maximum StaticLoad,Back	2400Pa(50lb/ft ²)
	Module efficiency STC (%)	28.9%	29.0%	29.3%	29.5%	29.8%	30.0%	Safety Class	Class II

OPERATING PARAMETERS

Nominal Operating Cell Temperature(NOCT)	45 ± 2 °C
Temperature Coefficient of Isc	+0.045%/ °C
Temperature Coefficient of Voc	-0.23%/ °C
Temperature Coefficient of Pmax	-0.28%/ °C

*Specs are subject to change without further notification

I-V CURVE(AS595-620M10-144)

