

N-type TOPCon Mono

420-440W

AS420-440M10-108 Bifacial

Bifacial Half-Cell PV Module



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%



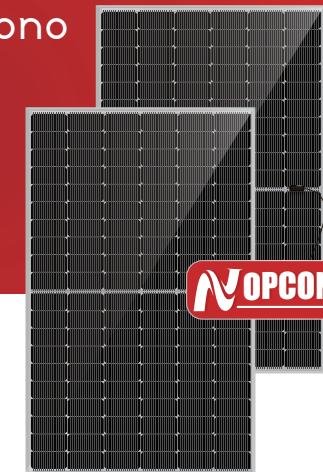
COMPATIBLE with mainstream trackers
effective product for utility power plant



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



TOPCON

30 Year

Warranty for Substrate
Power Output

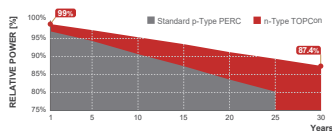
15 Year

Warranty for Materials
and Processing

0.4 %

Annual degradation

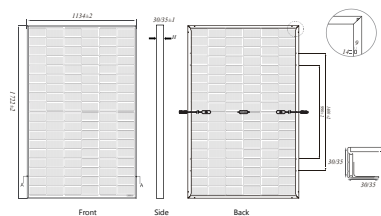
LINEAR PERFORMANCE WARRANTY



AS420-440M10-108 Bifacial Half-Cell PV Module

MECHANICAL SPECIFICATION

Cell	N-type TOPCon Mono
No. of cells	108(6x18)
Cable Length	300mm(+/-)300mm(-)
Cable Cross Section Size	4mm ² (IEC)
Junction Box	IP68
Connector	MC4 Compatible
Weight	24.2kg $\pm 3\%$
Cells Type	Mono 182x91mm
Dimension(LxWxT)	1722x22mmx1134x2mmx30/35 ± 1 mm
Packaging	36pcs/pallet, 360pcs/20GP; 936pcs/40HQ (30mm) 31 pcs/pallet, 306pcs/20GP; 806pcs/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	AS420M10-108		AS425M10-108		AS430M10-108		AS435M10-108		AS440M10-108	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	420	321.1	425	325.0	430	328.7	435	332.5	440	336.3
Open Circuit Voltage(Voc/V)	39.41	36.50	39.53	36.60	39.65	36.80	39.77	36.90	39.89	40.00
Short Circuit Current(Isc/A)	13.53	11.36	13.59	11.42	13.65	11.49	13.71	11.55	13.77	11.61
Voltage at Maximum Power(Vmp/V)	31.85	29.90	32.05	30.00	32.25	30.20	32.45	30.40	32.65	30.60
Current at Maximum Power(Imp/A)	13.19	10.75	13.27	10.82	13.34	10.89	13.41	10.96	13.48	11.03
Module Efficiency(%)	21.51		21.76		22.02		22.30		22.53	

ELECTRICAL CHARACTERISTICS

OPERATING PARAMETERS

5%	Maximum power (W)	441	446	452	457	462	Maximum System Voltage	1500VDC
	Module efficiency STC (%)	22.6%	22.9%	23.1%	23.4%	23.7%	Operating Temperature	-40°C ~ +85°C
15%	Maximum power (Total)	483	489	495	500	506	Maximum Series Fuse	30A
	Module efficiency STC (%)	24.7%	25.0%	25.3%	25.6%	26.0%	Maximum Static Load, Front	5400Pa(112lb/ft ²)
25%	Maximum power (Total)	525	531	538	544	550	Maximum Static Load, Back	2400Pa(50lb/ft ²)
	Module efficiency STC (%)	26.9%	27.2%	27.5%	27.9%	28.2%	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	-0.25%/°C
Temperature Coefficient of Pmax	-0.29%/°C

*Specs are subject to change without further notification

I-V CURVE(AS420-440M10-108)

