

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



30 Year

Warranty for Extra Linear Power Output

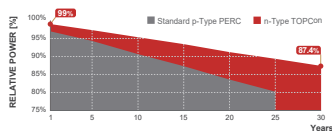
15 Year

Warranty for Materials and Processing

0.4 %

Annual degradation

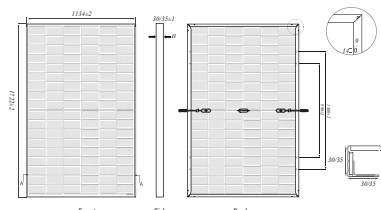
LINEAR PERFORMANCE WARRANTY



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

MECHANICAL SPECIFICATION

Cell	N-type TOPCon Mono
No. of cells	108(6x18)
Cable Length	300mm(+1/300mm(-))
Cable Cross Section Size	4mm ² (IEC)
Junction Box	IP68
Connector	MC4 Compatible
Weight	24.2kgs $\pm 3\%$
Cells Type	Mono 182x91mm
Dimension(LxWxT)	1722x22mmx1134x2mmx30/35 ± 1 mm
Packaging	36pcs/pallet, 360pcs/20GP; 936pcs/40HQ(30mm) 31pcs/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	315	425	319	430	323	435	327	440	331
Open Circuit Voltage(Voc/V)	38.49	36.68	38.73	36.88	38.96	37.08	39.19	37.28	39.42	37.48
Short Circuit Current(Isc/A)	13.99	11.26	14.06	11.32	14.13	11.38	14.20	11.44	14.27	11.50
Voltage at Maximum Power(Vmp/V)	31.63	29.30	31.84	29.51	32.04	29.71	32.25	29.92	32.45	30.12
Current at Maximum Power(Imp/A)	13.28	10.75	13.35	10.81	13.42	10.87	13.49	10.93	13.56	10.99
Module Efficiency(%)	21.51		21.76		22.02		22.28		22.53	

ELECTRICAL CHARACTERISTICS

	Maximum power (W)	441	446	452	457	462
5%	Module efficiency STC (%)	22.58%	22.85%	23.12%	23.39%	23.66%
15%	Maximum power (Total)	483	489	495	500	506
	Module efficiency STC (%)	24.73%	25.03%	25.32%	25.62%	25.91%
25%	Maximum power (Total)	525	531	538	544	550
	Module efficiency STC (%)	26.89%	27.21%	27.53%	27.85%	28.17%

OPERATING PARAMETERS

Maximum System Voltage	1500VDC
Operating Temperature	-40 °C ~ +85 °C
Maximum Series Fuse	30A
Maximum Static Load, Front	5400Pa(112lb/ft ²)
Maximum Static Load, Back	2400Pa(50lb/ft ²)
Safety Class	Class II

OPERATING PARAMETERS

Normal 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)

