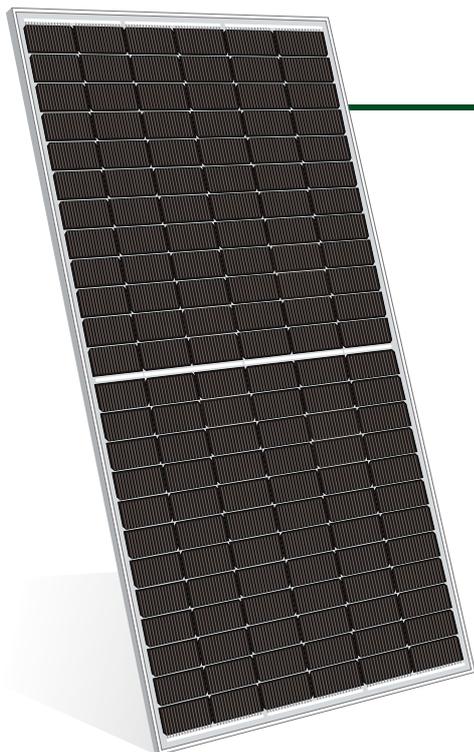


# N Type Topcon PV Module

## Bifacial Glass-to-Glass



**PIX G12R 108 N**  
470 - 520 Wp



Power Tolerance  
**+4.99Wp**



Efficiency Upto  
**23.35 %**



Module Warranty  
**12 Years**



Output Warranty  
**30 Years**

## ABOUT PIXON

PIXON is a venture of the Marwadi group. It is equipped with the state-of-the-art technology and turnkey machinery of 1.3 GW line capacity for solar modules and houses clean room environment facility to 1 GW manufacturing line for EVA films. As the world adheres to solar energy revolution, PIXON envisions to globally provide efficient solar energy products and solutions. Thus, enhance and contribute to Global Climate Sustainability.

## KEY FEATURES



**PID Resistance** with long term reliability.



**Better Performance** even at low irradiation.



Maximum System Voltage:  
**1500 V DC.**



Increased string length & **low BOS Cost.**



Withstand upto **5400 Pa** of snow load.



Withstand upto **2400 Pa** of wind load.



**Rigorous Testing Criteria** 100% EL Inspection ensuring defect-free modules.

**IDEAL FOR:** Utility Projects, Commercial & Industrial Projects, Residential Projects, Institutional Projects, Off-grid Projects

### PIXON GREEN ENERGY PRIVATE LIMITED

**Manufacturing Unit:** R.S. No.: 157/1, 158/1, 158/2, 165/1, 166 of Khijadiya Nana, R.S. No.: 15/1, Rajkot - Jamnagar Highway, Paddhari, Rajkot - 360110

1800 108 8800 | sales@pixonenergy.com

\*Due to continuous product updation, specifications may change without notice.



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the new Green!**

## PIX G12R 108 N 520

G12R 520W 23.35% +4.99Wp ≤1.0%

### N Type Topcon PV Modules

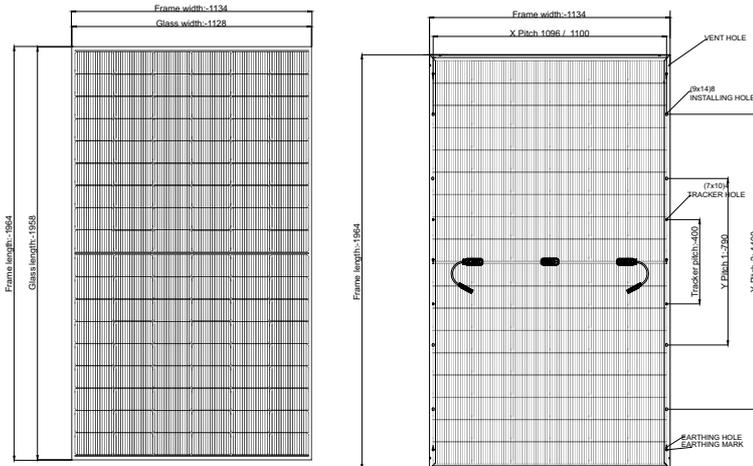
16 BB HALF-CUT CELL MODULE

MAXIMUM POWER OUTPUT

MAXIMUM EFFICIENCY

POWER TOLERANCE

FIRST YEAR POWER DEGRADATION



\*All Dimensions are in mm.  
\*Cable Length may vary based on Requirements.

### MECHANICAL DATA

Length x Width x Thickness (L x W x T)	1964 mm (L) x 1134 mm (W) x 35/30 mm (T)
Weight	29±1 Kg
Solar Cells per Module (Units) / Arrangement	108 cells / 2(9*6)
Solar Cell Type & Size	G12R N-type TOPCon Bifacial
Front Glass (Material / Thickness)	2 mm Low Iron HTAR semi-tempered glass
Back Glass (Material / Thickness)	2 mm Low Iron Printed semi-tempered glass
Encapsulate	PID free & UV Resistant
Junction Box (Protection degree / Material)	IP68 / Weatherproof PPO
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable cross-section & Length	4 mm <sup>2</sup> & 400mm
Frame	Anodized Aluminium Alloy

### MECHANICAL LOADING

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa

### THERMAL CHARACTERISTICS

Temp coefficient of current (Isc), (%/°C)	0.046	Operating temperature range	-40 to 85
Temp coefficient of voltage (Voc), (%/°C)	-0.26	Bifaciality factor	80±10
Temp coefficient of power (Pmax), (%/°C)	-0.30	Maximum System voltage	1500 VDC
NOCT (%/°C)	43±2	Maximum Series Fuse Rating	30 A

### ELECTRICAL PARAMETERS AT STC & NOCT

Test Conditions		STC	NOCT																				
Peak Power	Pmax [Wp]	470	354.85	475	358.63	480	362.40	485	366.18	490	369.95	495	373.73	500	377.50	505	381.28	510	385.05	515	388.83	520	392.60
Module Efficiency	η [%]	21.10		21.33		21.55		21.78		22.00		22.23		22.45		22.67		22.90		23.12		23.35	
Open-Circuit Voltage	Voc [V]	42.06	39.96	42.24	40.13	42.42	40.30	42.60	40.47	42.78	40.64	42.96	40.81	43.14	40.98	43.32	41.15	43.50	41.33	43.68	41.50	43.86	41.67
Short-Circuit Current	Isc [A]	15.57	12.56	15.62	12.61	15.68	12.65	15.73	12.69	15.78	12.73	15.84	12.78	15.89	12.82	15.94	12.86	16.00	12.91	16.05	12.95	16.11	13.00
Max Rated Voltage	Vmp [V]	34.63	32.28	34.81	32.44	34.99	32.61	35.17	32.78	35.34	32.94	35.52	33.10	35.69	33.26	35.87	33.43	36.05	33.60	36.23	33.77	36.41	33.93
Max Rated Current	Imp [A]	13.58	10.97	13.65	11.03	13.72	11.09	13.80	11.15	13.87	11.21	13.94	11.26	14.01	11.32	14.08	11.38	14.15	11.43	14.22	11.49	14.29	11.55

### BIFACIAL OUTPUT-REAR SIDE POWER GAIN

	Peak Power (STC)	470	475	480	485	490	495	500	505	510	515	520
10%	Maximum Power (Pmax)	517	522.5	528	533.5	539	544.5	550	555.5	561	566.5	572
	Module Efficiency (%)	23.21	23.46	23.71	23.95	24.2	24.45	24.69	24.94	25.19	25.44	25.68
15%	Maximum Power (Pmax)	540.5	546.25	552	557.75	563.5	569.25	575	580.75	586.5	592.25	598
	Module Efficiency (%)	24.27	24.53	24.78	25.04	25.3	25.56	25.82	26.08	26.33	26.59	26.85
20%	Maximum Power (Pmax)	564	570	576	582	588	594	600	606	612	618	624
	Module Efficiency (%)	25.32	25.59	25.86	26.13	26.4	26.67	26.94	27.21	27.48	27.75	28.02
25%	Maximum Power (Pmax)	587.5	593.75	600	606.25	612.5	618.75	625	631.25	637.5	643.75	650
	Module Efficiency (%)	26.38	26.66	26.94	27.22	27.5	27.78	28.06	28.34	28.62	28.9	29.18
30%	Maximum Power (Pmax)	611	617.5	624	630.5	637	643.5	650	656.5	663	669.5	676
	Module Efficiency (%)	27.43	27.73	28.02	28.31	28.6	28.89	29.18	29.48	29.77	30.06	30.35

### PACKAGING CONFIGURATION

Modules per Box	31 Pieces
Modules per 40' Container	620 Pieces

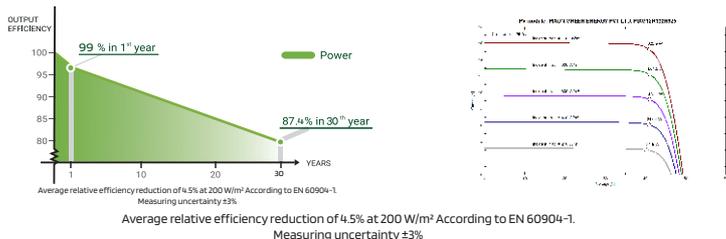
### WARRANTY

Product Warranty	12 Years
Performance Warranty	30 Year linear power warranty 0.40% Annual degradation over 30 years.

### CERTIFICATIONS



\*Note: These certificates are under process.



**Solar is the new Green!**