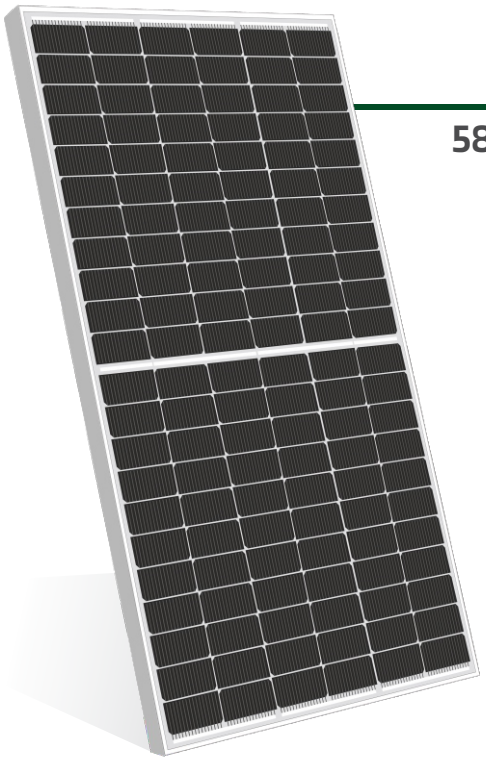
N Type Topcon PV Module

Bifacial Glass-to-Glass DCR

PIXON
Redefining Solar



PIX G12R 132 N

585 - 630 Wp DCR

Power Tolerance
+4.99Wp

Efficiency Upto
23.32 %

Module Warranty
12 Years

Output Warranty
30 Years

KEY FEATURES

- **PID Resistance** with long term reliability
- **Better Performance** even at low irradiation
- Maximum System Voltage: **1500 V DC**
- **100%** Insulation Hi-Pot Test
- 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, Floating Solar, 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

ABOUT PIXON

PIXON is a venture of the Marwadi Group. It is equipped with state-of-the-art manufacturing facilities, including a 1.6 GW+ solar module production capacity and a 1 GW encapsulant film manufacturing line housed in a cleanroom environment.As the world embraces the solar energy revolution, PIXON envisions providing efficient solar energy products and solutions globally, thereby enhancing and contributing to global climate sustainability.

CERTIFICATIONS

ALMM APPROVED

IEC (International Electrotechnical Commission
- IEC 61215-1:2023
- IEC 61215-1-1:2023
- IEC 61215-2:2023
- IEC 61730-1:2016
- IEC 61730-2:2016
- IEC TS 61701 Ed.3 :2020 Severity-6
- IEC TS 62804-1:2015
- IEC 61853-1:2011
- IEC 61853-2:2016
- IEC 62716:2013
- IEC 60068-2-68:1994-08
- IEC TS 63342:2022

BIS: Bureau of Indian Standards
- IS 14286:2010
- IS 61730-1:2004
- IS 61730-2:2004

ISO Certification
- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018(OHSAS)

CE Mark Testing & Certification

CLASS II

*Note : These certificates are under process.

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

A Venture By
MARWADI GROUP

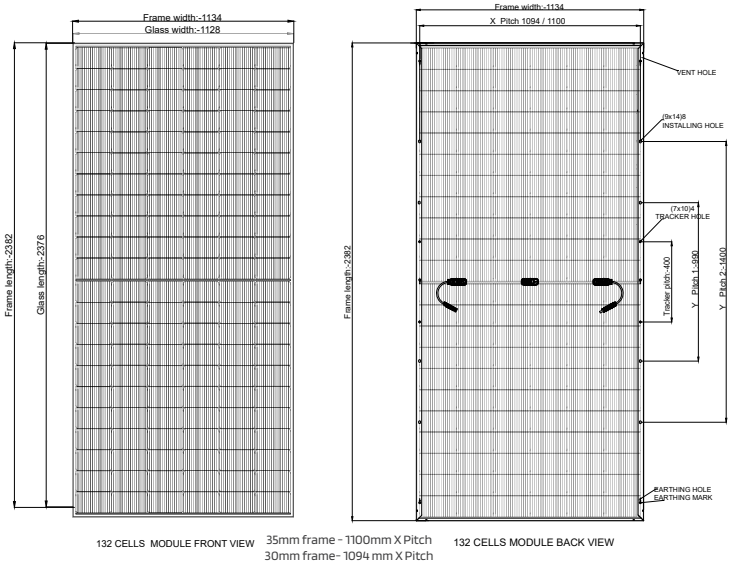
D/PIXG12RHT/132/270626/E-01-01

PIXON
Redefining Solar

TECHNICAL DATASHEET

Topcon Glass To Glass

PIX G12R 132 N 630 DCR	G12R	630W	23.32%	+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



132 CELLS MODULE FRONT VIEW | 35mm frame - 1100mm X Pitch
30mm frame- 1094 mm X Pitch | 132 CELLS MODULE BACK VIEW

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

MECHANICAL DATA

Length x Width x Thickness (L x W x T)	2382 (L) x 1134 (W) x 35/30 mm (T)
Weight	33±1 Kg
Solar Cells per Module (Units) / Arrangement	132 Cells / 2(11*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 & 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_2 & 300mm
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	Biafaciality factor	80±10%
Temp coefficient of power (Pmax) (%/°C)	-0.30	Maximum System voltage	1500/2000 VDC
NOCT (%/°C)	43±2	Maximum Series Fuse Rating	35 A

ELECTRICAL PARAMETERS AT STC & NOCT

Test Conditions		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power	Pmax [Wp]	585	441.68	590	445.45	595	449.23	600	453.00	605	456.78	610	460.55	615	464.33	620	468.10	625	471.88	630	475.65
Module Efficiency	η [%]	21.66	-	21.84	-	22.03	-	22.21	-	22.40	-	22.58	-	22.77	-	22.95	-	23.14	-	23.32	-
Open-Circuit Voltage	Voc [V]	47.70	45.32	47.90	45.51	48.10	45.70	48.30	45.89	48.50	46.08	48.70	46.27	48.90	46.46	49.10	46.65	49.30	46.84	49.50	47.03
Short-Circuit Current	Isc [A]	15.67	12.65	15.72	12.69	15.77	12.73	15.82	12.77	15.87	12.81	15.92	12.85	15.97	12.89	16.02	12.93	16.07	12.97	16.12	13.01
Max Rated Voltage	Vmp [V]	39.96	37.24	40.14	37.41	40.34	37.60	40.55	37.79	40.75	37.98	40.94	38.16	41.14	38.34	41.34	38.53	41.53	38.71	41.73	38.89
Max Rated Current	Imp [A]	14.65	11.84	14.70	11.88	14.75	11.92	14.80	11.96	14.85	12.00	14.90	12.04	14.95	12.08	15.00	12.12	15.05	12.16	15.10	12.20

BIFACIAL OUTPUT-REARSIDE POWER GAIN

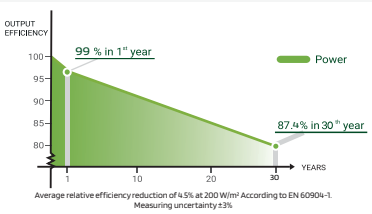
	Peak Power (STC)	585	590	595	600	605	610	615	620	625	630
10%	Maximum Power (Pmax)	643.5	649	654.5	660	665.5	671	676.5	682	687.5	693
	Module Efficiency (%)	23.82	24.03	24.23	24.43	24.64	24.84	25.04	25.25	25.45	25.66
15%	Maximum Power (Pmax)	672.75	678.5	684.3	690	695.8	701.5	707.3	713	718.75	724.5
	Module Efficiency (%)	24.91	25.12	25.33	25.54	25.76	25.97	26.18	26.4	26.61	26.82
20%	Maximum Power (Pmax)	702	708	714	720	726	732	738	744	750	756
	Module Efficiency (%)	25.99	26.21	26.43	26.65	26.88	27.10	27.32	27.54	27.77	27.99
25%	Maximum Power (Pmax)	731.25	737.5	743.8	750	756.3	762.5	768.8	775	781.25	787.5
	Module Efficiency (%)	27.07	27.30	27.53	27.77	28.00	28.23	28.46	28.69	28.92	29.15
30%	Maximum Power (Pmax)	760.5	767	773.5	780	786.5	793	799.5	806	812.5	819
	Module Efficiency (%)	28.15	28.39	28.64	28.88	29.12	29.36	29.60	29.84	30.08	30.32

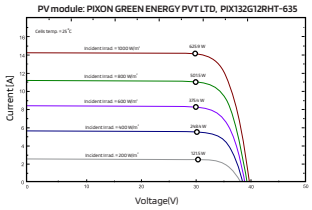
PACKAGING CONFIGURATION

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.





Average relative efficiency reduction of 4.5% at 200 W/m² According to EN 60904-1.
Measuring uncertainty ±3%

CERTIFICATIONS

IR-72004570

*Note : These certificates are under process.

BUILT TO POWER TOMORROW

D/PIXG12RHT/132/270626/E-01-01