

# Poly Crystalline PV Modules



**PIX P2 36**  
**145-180 Wp**



Power Tolerance  
**+4.99Wp**



Efficiency upto  
**17.97 %**



Module Warranty  
**10 Years**



Output Warranty  
**25 Years**

## KEY FEATURES



**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.

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

## ABOUT PIXON

PIXON is a venture of the Marwadi Group. It is equipped with the state-of-the-art technology and turnkey machinery of 400 MW line capacity. As the world adheres to the solar energy revolution, PIXON envisions to globally provide efficient solar energy products & solutions. Thus, enhance and contribute to the Global Climate Sustainability.

## CERTIFICATIONS



**IEC (International Electrotechnical Commission)**

- IEC 61215-1:2016
- IEC 61215-2:2016
- IEC 61730-1:2016
- IEC 61730-2:2016
- IEC TS 62804-1
- IEC 61701 End.2:2011 Severity-6
- IEC 61853-1
- IEC 60904-1

**BIS: Bureau of Indian Standards**

- IS 14286:2010
- IS 61730-1:2004
- IS 61730-2:2004

**US Certification**

- UL 61215-1:2017
- UL 61215-2:2017
- UL 61730-1:2017
- UL 61730-2:2017

**ISO Certification**

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

**CE Mark Testing & Certification**

CLASS II

### PIXON GREEN ENERGY PRIVATE LIMITED

**Corporate Office:** 2<sup>nd</sup> Floor, Star Avenue, Nr. Moti Tanki Chowk, Gymkhana Road, Rajkot - 360001. Gujarat, India.

**Manufacturing Unit:** Rajkot - Jamnagar Highway, PO: Depaliya, TA: Padadhari, Rajkot - 360110. Gujarat, India.



**Solar is**  
**the new Green!**

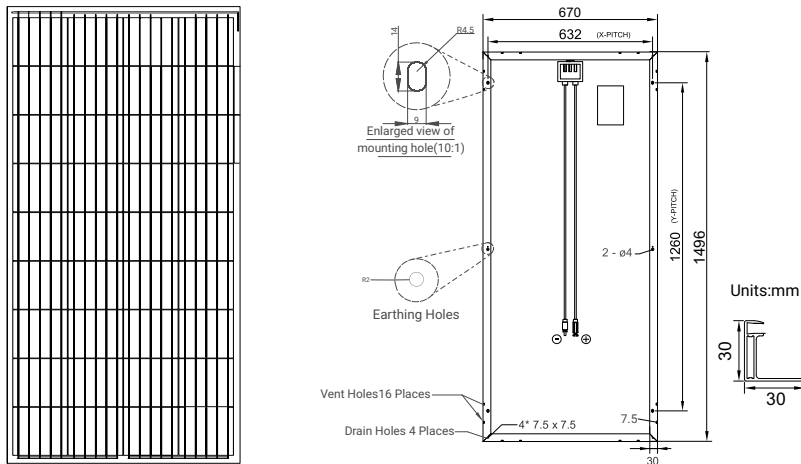
# TECHNICAL DATASHEET

**PIX P2 36 145-180**

POLY CRYSTALLINE PV MODULES



## MECHANICAL DIAGRAMS



## MECHANICAL DATA

|   |  |
|---|--|
| Cells specifications (Number, Type, Size) | 36 (4X9), 5BB Poly Crystalline cells, 157mm X 157mm              |
| Module Dimensions                         | 1496mm X 670mm X 30mm  |
| Weight                                    | 10.5kg   |
| Front glass                               | High transmission Low iron tempered glass, AR coated, 3.2 mm (T) |
| Embedding                                 | Low shrinkage PID resistance EVA                                 |
| Back sheet                                | PVDF   |
| Junction box                              | IP67/IP68, 4-Rail  |
| Number of diodes                          | 3 Bypass diodes of 15A   |
| Cables & Connectors                       | Cable length 1200mm, Ø 4mm <sup>2</sup> & MC-4 Connectors        |
| Frame                                     | Anodized Aluminum Silver Frame (Black available on request)      |

## ELECTRICAL DATA (ALL DATA REFERS TO STC (AM 1.5, 1000 W/m<sup>2</sup>, 25°C))

|                       |                       | 145   | 150   | 155   | 160   | 165   | 170   | 175   | 180   |
|-----------------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Peak Power            | P <sub>max</sub> [Wp] | 145   | 150   | 155   | 160   | 165   | 170   | 175   | 180   |
| Module efficiency     | η [%]                 | 14.48 | 14.99 | 15.49 | 15.98 | 16.47 | 16.97 | 17.46 | 17.97 |
| Open-circuit voltage  | V <sub>oc</sub> [V]   | 21.28 | 21.64 | 21.92 | 22.28 | 22.64 | 23.04 | 23.36 | 23.65 |
| Short-circuit current | I <sub>sc</sub> [A]   | 9.04  | 9.14  | 9.23  | 9.33  | 9.43  | 9.52  | 9.63  | 9.72  |
| Max Rated voltage     | V <sub>mp</sub> [V]   | 17.60 | 17.96 | 18.32 | 18.68 | 19.04 | 19.37 | 19.69 | 20.05 |
| Max Rated current     | I <sub>mp</sub> [A]   | 8.25  | 8.36  | 8.47  | 8.57  | 8.67  | 8.78  | 8.89  | 8.98  |

1) STC: 1000 W/m<sup>2</sup> irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3.  
 2) NOCT: 800 W/m<sup>2</sup> irradiance, 20°C cell temperature, AM 1.5g spectrum according to EN 60904-3.

3) Average relative efficiency reduction of 5% at 200 W/m<sup>2</sup> according to EN 60904-1.

## ELECTRICAL PARAMETERS AT NOCT

|                       |                       | 106.62 | 110.32 | 114.01 | 117.65 | 121.27 | 124.90 | 128.55 | 132.26 |
|-----------------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Peak Power            | P <sub>max</sub> [Wp] | 106.62 | 110.32 | 114.01 | 117.65 | 121.27 | 124.90 | 128.55 | 132.26 |
| Open-circuit voltage  | V <sub>oc</sub> [V]   | 19.92  | 20.26  | 20.53  | 20.86  | 21.20  | 21.57  | 21.87  | 22.14  |
| Short-circuit current | I <sub>sc</sub> [A]   | 7.23   | 7.31   | 7.38   | 7.46   | 7.55   | 7.62   | 7.70   | 7.77   |
| Rated voltage         | V <sub>mp</sub> [V]   | 16.48  | 16.82  | 17.16  | 17.49  | 17.83  | 18.13  | 18.44  | 18.77  |
| Rated current         | I <sub>mp</sub> [A]   | 6.60   | 6.69   | 6.78   | 6.86   | 6.94   | 7.02   | 7.11   | 7.18   |

## THERMAL DATA

|  |               |
|--|---------------|
| Tc of open circuit voltage (β)           | -0.2885% / °C |
| Tc short-circuit current (α)             | 0.0576% / °C  |
| Tc rated power (δ)                       | -0.3797% / °C |
| NOCT (Normal Operating Cell Temperature) | 45°C ± 2°C    |
| Temperature range                        | -40°C to 85°C |

## PERMISSIBLE OPERATING CONDITIONS

|                                    |  |
|------------------------------------|--|
| Max. system voltage                | 1500 VDC                                 |
| Max. reverse current / fuse rating | 15 A (IEC) / 20 A (UL)                   |
| Protection class                   | Class A (Safety Class II)                |
| Mechanical load capacity           | 5400 Pa (Snow Load), 2400 Pa (Wind Load) |

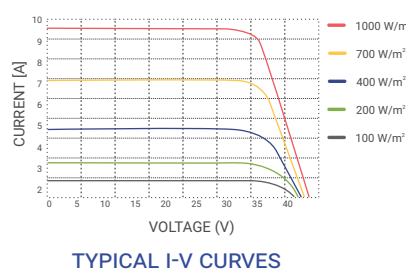
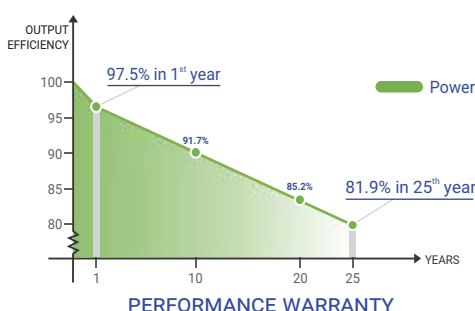
## PACKAGING INFORMATION

|                                      |                              |
|--------------------------------------|------------------------------|
| No. of modules per pallet            | 31                           |
| No. of pallets per container (40 HC) | 28                           |
| Pallet dimensions (in mm)            | 1526 X 996 X 840 (L X W X H) |
| Pallet weight                        | 385.5 kg                     |

## WARRANTY

|                      |  |
|----------------------|--|
| Product warranty     | 10 years   |
| Performance warranty | Linear power warranty for 25 years with 2.5% for 1st year degradation and 0.65% from year 2 to year 25 |

## CHARACTERISTIC GRAPH



**Note:**  
 • Due to continuous updates, the specifications included in this datasheet are subject to change without notice.  
 • The electrical data given here is for reference purpose only.  
 • Please confirm your exact requirements with the sales representative while placing your order.  
 • Read safety and installation manual before using the product.  
 • Tc=Temperature Co-efficient