



**CLEAR VISION**  
**CLEAN ENERGY**

**India's Leading  
Solar Panel Manufacturers**

# ABOUT MACWIN

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**Powering India's Tomorrow—Today.**

Macwin Solar Energy Pvt. Ltd. is one of India's fastest-growing solar panel manufacturers. We drive the clean energy shift with precision-engineered solar PV modules for homes, industries, farms, and large-scale projects. Founded in 2021 by two brothers Bharat Budheliya and Hardik Budheliya, Macwin began its journey in a 10,000 sq. ft. facility. In just a few years, it has expanded into a 2,75,000 sq. ft. advanced manufacturing plant with an annual production capacity of 1GW (on track to 2GW).

The state-of-the-art factory integrates AI-driven production lines and stringent quality control systems, ensuring every solar module meets global standards of performance and durability. Macwin specializes in a broad spectrum of solar PV technologies from cost-effective and high-efficiency Mono PERC modules to next generation N-Type TOPCon panels and large-format G-12R series modules. Every product reflects our mission to make clean energy accessible for all, empowering residential and commercial customers alike with sustainable, bill-reducing power solutions.

At Macwin, solar isn't just a product.  
It's a promise of a brighter, bill-free tomorrow.



# MILESTONE



**2021**

Macwin Solar was founded to advocate for renewable energy.

**2022**

Commenced operations with a Polycrystalline and a 25 MW factory capacity.

**2023**

On track to reach a 10BB 100 MW production capacity.

**2024**

Upgraded to TOPCon Glass-to-Glass within our 1 GW line enhancing efficiency and tech leadership.

**2025**

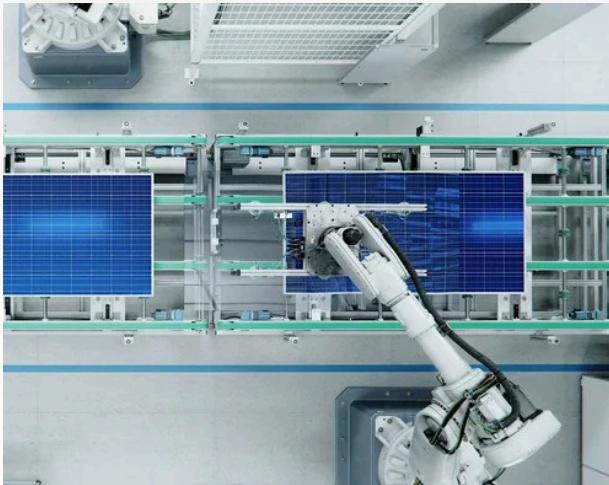
Scaling up to 2 GW with TOPCon Glass-to-Glass and G-12R technology, accelerating our vision to lead India's next-gen solar manufacturing revolution.

**2026**

Initiated plans for an in house solar cell production line.

# OUR FACILITIES

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As of 2024, Macwin operates a sprawling 2,75,000 sq. ft. integrated solar panel production facility in Gujarat. This state-of-the-art plant is fitted with advanced machinery and AI-enabled precision lines, ensuring that each panel is built with uncompromising quality and efficiency. We maintain in-house reliability testing laboratories where every module undergoes multi-stage checks for durability and performance. The facility's optimized processes and strategic location enable fast delivery of orders across India, providing customers with quick turnaround and dependable service.

# OUR VISION, MISSION

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## VISION

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Our vision is rooted in transparency, quality, integrity, and service. We strive to become India's most trusted and recognized solar brand, powering rooftops, industries, and communities across every state. By upholding our core values in every innovation and partnership, we aim to lead the nation's clean energy revolution and light up every corner of India with sustainable solar power.

## MISSION

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Our mission is to contribute to a net-zero carbon future and support global renewable energy goals by accelerating the adoption of clean, reliable solar power. We are committed to making solar energy accessible and affordable for every home and business, delivering high-efficiency PV modules built with cutting-edge automation and world-class quality. Through continuous innovation and a customer-centric approach, we empower communities and industries to harness the sun's energy for a greener, more prosperous tomorrow.





## P-TYPE M10

525W to 560W

## N-TYPE TOPCON

570W to 620W

## TOPCON G-12R

595W to 650W

**CLEAR VISION. CLEAN ENERGY.**



### High Efficiency

Excellent Module Conversion Efficiency of up to 23.24%



### Better Weak Light Performance

Delivers higher power output even in low-light conditions such as cloudy, rainy, or foggy days.



### 5%-10% Additional Power Generation

More than 5%-10% additional power gain compared to the regular modules.



### High Saving

Lower LCOE, reduced BOS cost, shorter payback time.



### ZERO LID (Light Induced Degradation)

Excellent anti-LeTID. Low power degradation, high energy yield.



### PID Resistance

Excellent Anti-PID Performance Guarantee.



12 Years Warranty For Materials And Processing



30 Years Warranty For Linear Power Output



BIS Certified



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**Factory Unit:** Plot-56, Olpad GIDC, B/H Vikas Petrol Pump, Surat, Olpad Rd, Olpad, Gujarat - 394540 | Ph. +91 95108 59606

# P-TYPE M10 TECHNICAL DATA

ELECTRICAL PERFORMANCE [ Note : Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty < ±3%. Average value of NOCT: 45.08 ± 2 °C ]

| ELECTRICAL CHARACTERISTICS      | MSE525WC |         | MSE530WC |         | MSE535WC |         | MSE540WC |         | MSE545WC |         | MSE550WC |         | MSE555WC |         | MSE560WC |         |
|---------------------------------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|
|                                 | STC      | NOCT    |
| Nominal Maximum Power (Pmax)    | 525 W    | 388.64  | 530 W    | 392.35  | 535 W    | 396.05  | 540 W    | 399.75  | 545 W    | 403.45  | 550 W    | 407.15  | 555 W    | 410.85  | 560 W    | 414.55  |
| Optimum Operating Voltage (Vmp) | 41.28 V  | 38.50 V | 41.51 V  | 38.71 V | 41.75 V  | 38.94 V | 41.97 V  | 39.14 V | 42.20 V  | 39.36 V | 42.42 V  | 39.56 V | 42.64 V  | 39.77 V | 42.89 V  | 40.00 V |
| Optimum Operating Current (Imp) | 12.72 A  | 10.08 A | 12.77 A  | 10.12 A | 12.82 A  | 10.16 A | 12.86 A  | 10.16 A | 12.92 A  | 10.24 A | 12.97 A  | 10.27 A | 13.02 A  | 10.31 A | 13.06 A  | 10.35 A |
| Open Circuit Voltage (Voc)      | 50.02 V  | 46.78 V | 50.21 V  | 46.96 V | 50.40 V  | 47.13 V | 50.61 V  | 47.33 V | 50.80 V  | 47.51 V | 50.90 V  | 47.60 V | 51.18 V  | 47.86 V | 51.37 V  | 48.04 V |
| Short Circuit Current (Isc)     | 13.20 A  | 10.63 A | 13.24 A  | 10.66 A | 13.28 A  | 10.69 A | 13.33 A  | 10.73 A | 13.36 A  | 10.76 A | 13.39 A  | 10.78 A | 13.44 A  | 10.82 A | 13.49 A  | 10.86 A |
| Module Efficiency               | 20.33 %  |         | 20.53 %  |         | 20.73 %  |         | 20.92 %  |         | 21.12 %  |         | 21.31 %  |         | 21.50 %  |         | 21.70 %  |         |

| STACKING STANDARD                 | 20FT                     | 40FT |
|-----------------------------------|--------------------------|------|
| No. of Modules per Container:     | 336                      |      |
| No. of Pallets per Container:     | 12                       |      |
| No. of Modules per Pallet/Weight: | 28 Nos/840 Kg            |      |
| Pallet Dimensions in mm:          | 2320(L) *1000(w)*1275(H) |      |

| MECHANICAL SPECIFICATIONS |   |
|---------------------------|---|
| Dimensions                | (L) 2278 mm x (w) 1134 mm x (H) 35 mm               |
| Weight(kg)                | ~28 Kg  |
| Solar cells               | 144 pcs monocrystalline Silicon (PERC), Multi BB    |
| Frame                     | Silver Anodized Aluminium Alloy                     |
| Backside                  | UV protected reflective backsheet                   |
| Encapsulate               | Ultra - clear PID free EVA (Ethylene-Vinyl-Acetate) |
| Solar Glass               | 3.2 mm, High Transmission, AR Coated Tempered Glass |
| Junction Box              | IP 68 certified, 3 diodes, Split junction box       |
| Series Fuse Rating        | 25 A  |
| Cable                     | Solar cable 400 mm length, 4 mm <sup>2</sup>        |
| Connectors                | MC4 compatible connectors                           |
| Application Class Rating  | Class A   |
| Safety Class Rating       | Class II  |
| Fire Safety               | Class C (Type 1)                                    |
| Surface load              | Snow load 5400 Pa, Wind load 2400 Pa                |

| MAXIMUM OPERATING CONDITIONS |   |
|------------------------------|---|
| Temperature range            | -40°C to +85°C                            |
| Maximum System Voltage       | 1500 VDC                                  |
| NOCT                         | 45 ± 2°C                                  |
| Hail Resistance              | Max. diameter of 25mm with velocity 23m/s |

| TEMPERATURE COEFFICIENTS |           |
|--------------------------|-----------|
| Current $\alpha$ (Isc) : | 0.048%/°C |
| Voltage $\beta$ (Voc) :  | -0.28%/°C |
| Power $\gamma$ (Pmax) :  | -0.34%/°C |

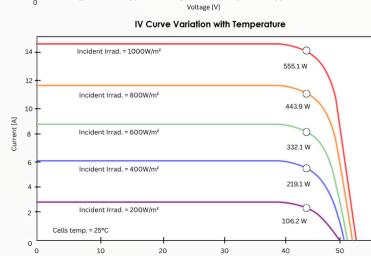
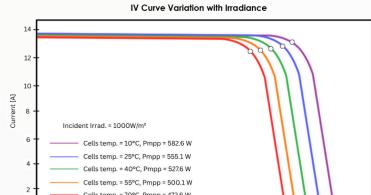
| PACKAGING CONFIGURATION         |     |
|---------------------------------|-----|
| Number of Modules per Pallet    | 31  |
| No of pallet                    | 20  |
| No of module, 40ft HC container | 620 |

**Caution:** Please read the safety and installation instructions before using the product.

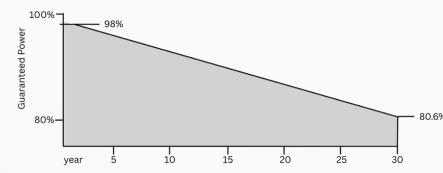
**Warranty:** Linear performance warranty for 30 years, with a degradation of up to 1% in the first year and 0.4% per year from year 2 to year 30. Please read the MACWIN'S warranty documents thoroughly.

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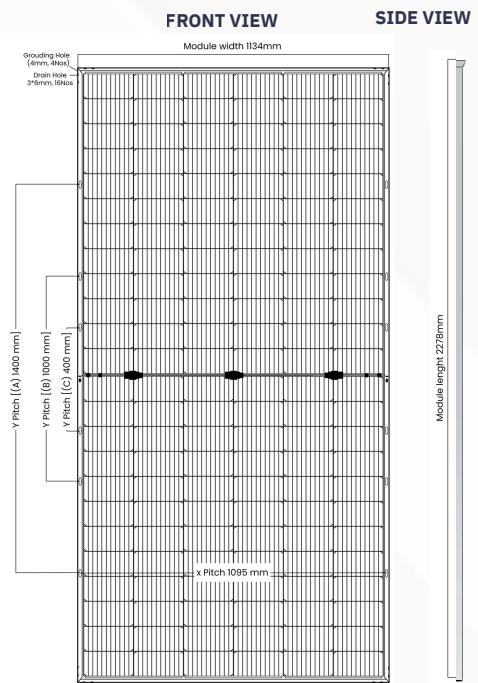
## REFERENCE IV CURVE DETAIL:



## LINEAR PERFORMANCE WARRANTY:



## DIMENSIONS:



# N-TYPE TOPCON TECHNICAL DATA

ELECTRICAL PERFORMANCE [ Note : Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty < ±3%. Average value of NOCT: 45.08 ± 2 °C ]

| ELECTRICAL CHARACTERISTICS      | MSE580144TGC |         | MSE585144TGC |         | MSE590144TGC |         | MSE595144TGC |         | MSE600144TGC |         |
|---------------------------------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|
|                                 | STC NOCT     |         | STC NOCT     |         | STC NOCT     |         | STC NOCT     |         | STC NOCT     |         |
| Nominal Maximum Power (Pmax)    | 580 W        | 435 W   | 585 W        | 439 W   | 590 W        | 443 W   | 595 W        | 439 W   | 600 W        | 450 W   |
| Optimum Operating Voltage (Vmp) | 44.75 V      | 42.02 V | 44.94 V      | 42.20 V | 45.12 V      | 42.38 V | 45.31 V      | 42.2 V  | 45.50 V      | 42.72 V |
| Optimum Operating Current (Imp) | 12.96 A      | 10.35 A | 13.02 A      | 10.40 A | 13.08 A      | 10.45 A | 13.14 A      | 10.41 A | 13.20 A      | 10.54 A |
| Open Circuit Voltage (Voc)      | 52.80 V      | 49.79 V | 53.01 V      | 49.98 V | 53.21 V      | 50.18 V | 53.42 V      | 49.98 V | 53.62 V      | 50.56 V |
| Short Circuit Current (Isc)     | 13.71 A      | 11.05 A | 13.77 A      | 11.10 A | 13.83 A      | 11.14 A | 13.89 A      | 11.04 A | 13.95 A      | 11.24 A |
| Module Efficiency               | 22.47 %      |         | 22.67 %      |         | 22.86 %      |         | 23.05 %      |         | 23.25 %      |         |

## BIFACIAL OUTPUT - BACKSIDE POWER GAIN @STC\* [ Bifaciality Factor: 80% ± 10% ]

[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual bifacial gain at the site (module currents indicated below).]

|     |   |                   |                   |                   |                   |                   |
|-----|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| 5%  | Nominal Maximum Power (Pmax)              | 609 W             | 614 W             | 620 W             | 625 W             | 630 W             |
|     | Module Short Circuit Current / Efficiency | 14.40 A / 23.60 % | 14.46 A / 23.80 % | 14.52 A / 24.00 % | 14.58 A / 24.21 % | 14.64 A / 24.41 % |
| 10% | Nominal Maximum Power (Pmax)              | 638 W             | 644 W             | 649 W             | 655 W             | 660 W             |
|     | Module Short Circuit Current / Efficiency | 15.08 A / 24.72 % | 14.95 A / 24.93 % | 15.21 A / 25.15 % | 15.28 A / 25.36 % | 15.34 A / 25.57 % |
| 25% | Nominal Maximum Power (Pmax)              | 725 W             | 731 W             | 738 W             | 744 W             | 750 W             |
|     | Module Short Circuit Current / Efficiency | 17.14 A / 28.09 % | 17.21 A / 28.33 % | 17.29 A / 28.57 % | 17.36 A / 28.82 % | 17.43 A / 29.06 % |

## MECHANICAL SPECIFICATIONS

|                             |   |
|-----------------------------|---|
| Dimensions                  | 2278 mm (L) x 1134 mm (W) x 35 mm (H)   |
| Weight(kg)                  | 33  |
| Cell type / No Of Cell      | 144 Half-Cut N-Type TOPCon Bifacial Solar Cells   |
| Frame                       | Anodized Aluminum Alloy (6005, Temper T6, Silver color)   |
| Front Cover                 | Low Iron Semi-Tempered AR Coated Glass (2 mm thick)   |
| Encapsulate                 | PID resistant and UV resistant Polymeric Film   |
| Back Cover                  | Low Iron Semi-Tempered Glass (2 mm thick)   |
| Junction Box                | 30A Split Junction Box (3 nos. with individual Bypass Diode)- Weatherproof (IP68)                           |
| Bypass Diode                | 50 A, 45 V, 200 °C Max Junction Temperature   |
| Cable                       | 4 sq. mm, 300 mm length (Custom cable lengths available on request)   |
| Connectors                  | MC4 compatible (Original MC4 available upon request)  |
| Application Class Rating    | Class A   |
| Safety Class Rating         | Class II  |
| Mechanical Load Test        | 5400 Pa Snow Test; 2400 Pa Wind Test (according to IEC & UL)  |
| Mounting Holes Pitch (Y)-mm | [A] 1400 , [B] 1100, [C] 400<br>(Holes at 400 mm Y-pitch for tracker can be provided upon customer request) |
| Mounting Holes Pitch (X)-mm | 1095  |

## MAXIMUM OPERATING CONDITIONS

|                             |                |
|-----------------------------|----------------|
| Operating Temperature:      | -40°C to +85°C |
| Maximum System Voltage:     | 1500 VDC       |
| Maximum Series Fuse Rating: | 30 A           |

## TEMPERATURE COEFFICIENTS

|                          |             |
|--------------------------|-------------|
| Current $\alpha$ (Isc) : | 0.0265%/°C  |
| Voltage $\beta$ (Voc) :  | -0.2261%/°C |
| Power $\gamma$ (Pmax) :  | -0.2909%/°C |

## STACKING STANDARD

### 20FT

### 40FT

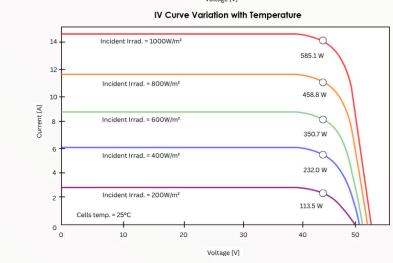
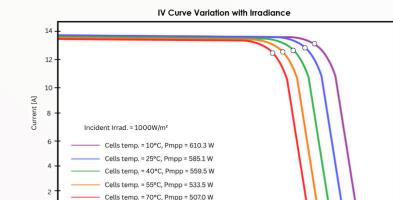
|                                   |                         |
|-----------------------------------|-------------------------|
| No. of Modules per Container:     | 270                     |
| No. of Pallets per Container:     | 10                      |
| No. of Modules per Pallet/Weight: | 27 Nos/940 Kg           |
| Pallet Dimensions in mm:          | 2320(L)*1000(w)*1275(H) |

**Caution:** Please read the safety and installation instructions before using the product.

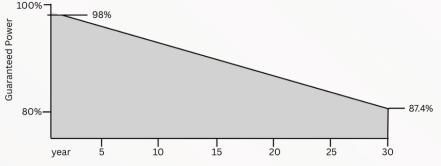
**Warranty:** Linear performance warranty for 30 years, with a degradation of up to 1% in the first year and 0.4% per year from year 2 to year 30. Please read the MACWIN'S warranty documents thoroughly.

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## REFERENCE IV CURVE DETAIL:



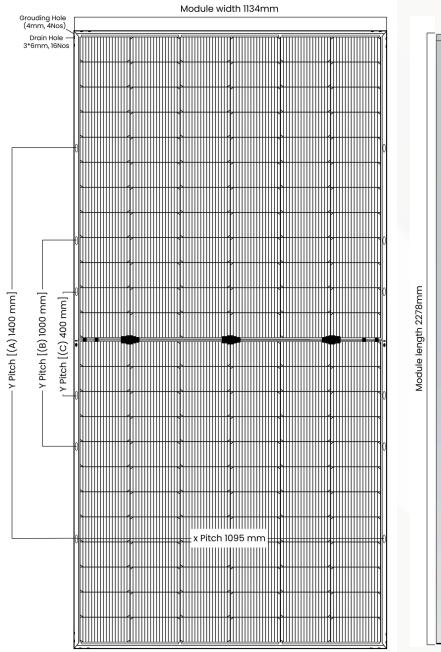
## LINEAR PERFORMANCE WARRANTY:



## DIMENSIONS:

### FRONT VIEW

### SIDE VIEW



# TOPCON G-12R SERIES TOPCON TECHNICAL DATA

ELECTRICAL PERFORMANCE [ Note : Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty < ±3%. Average value of NOCT: 45.08 ± 2 °C ]

| ELECTRICAL CHARACTERISTICS      | MSE595WC | MSE600WC | MSE605WC | MSE610WC | MSE615WC | MSE620WC | MSE625WC |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|
|                                 | STC      |
| Nominal Maximum Power (Pmax)    | 595 W    | 600 W    | 605 W    | 610 W    | 615 W    | 620 W    | 625 W    |
| Optimum Operating Voltage (Vmp) | 39.29 V  | 39.46 V  | 39.61 V  | 39.78 V  | 39.97 V  | 40.17 V  | 40.37 V  |
| Optimum Operating Current (Imp) | 15.15 A  | 15.21 A  | 15.28 A  | 15.34 A  | 15.39 A  | 15.44 A  | 15.49 A  |
| Open Circuit Voltage (Voc)      | 47.50 V  | 47.70 V  | 47.90 V  | 48.10 V  | 48.30 V  | 48.50 V  | 48.70 V  |
| Short Circuit Current (Isc)     | 15.90 A  | 15.95 A  | 16.00 A  | 16.05 A  | 16.10 A  | 16.15 A  | 16.20 A  |
| Module Efficiency               | 22.03 %  | 22.21 %  | 22.40 %  | 22.58 %  | 22.77 %  | 22.95 %  | 23.14 %  |

## BIFACIAL OUTPUT - BACKSIDE POWER GAIN @STC\* [ Bifaciality Factor: 80% ± 10% ]

[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual bifacial gain at the site (module currents indicated below).]

|     |   |       |       |       |       |       |       |       |
|-----|---|-------|-------|-------|-------|-------|-------|-------|
| 5%  | Nominal Maximum Power (Pmax)              | 625   | 630   | 635   | 641   | 646   | 651   | 656   |
|     | Module Short Circuit Current / Efficiency | 23.13 | 23.32 | 23.52 | 23.71 | 23.91 | 24.10 | 24.29 |
| 10% | Nominal Maximum Power (Pmax)              | 684   | 690   | 696   | 702   | 707   | 713   | 719   |
|     | Module Short Circuit Current / Efficiency | 25.33 | 25.54 | 25.76 | 25.97 | 26.18 | 26.40 | 26.61 |
| 25% | Nominal Maximum Power (Pmax)              | 744   | 750   | 756   | 763   | 769   | 775   | 781   |
|     | Module Short Circuit Current / Efficiency | 27.53 | 27.77 | 28.00 | 28.23 | 28.46 | 28.69 | 28.92 |

## MECHANICAL SPECIFICATIONS

|                          |  |
|--------------------------|--|
| Dimensions               | (L) 2382 X (W) 1303 X (H) 35 mm                      |
| Weight(kg)               | 34.0 kg  |
| Cell Type                | G-12R Series   |
| Frame                    | Silver Anodised Aluminum Alloy                       |
| Junction Box             | IP 68 certified, 3 diodes junction box               |
| Output Cable             | Solar cable 400 mm length or customized length, 4 mm |
| Connectors Type          | Compatible with MC4 connectors                       |
| Front Load               | Mechanical Load 5400 Pa (Snow Load)                  |
| Application Class Rating | Class A  |
| Safety Class Rating      | Class II   |
| Fire Safety              | Class C (Type 1)                                     |
| Rear Load                | 2400 Pa (Wind Load)                                  |

## PERMISSIBLE OPERATING CONDITIONS

|                            |   |
|----------------------------|---|
| Temperature range          | -40°C to +85°C                                |
| Maximum System Voltage     | 1500 VDC                                      |
| NOCT                       | 45 ± 2°C                                      |
| Hail Resistance            | Maximum diameter of 25 mm with velocity 23m/s |
| Maximum Series Fuse Rating | 30A   |
| Bifaciality Factor         | 80 ± 5%                                       |

## TEMPERATURE COEFFICIENTS

|                          |            |
|--------------------------|------------|
| Current $\alpha$ (Isc) : | -0.04%/°C  |
| Voltage $\beta$ (Voc) :  | -0.04%/°C  |
| Power $\gamma$ (Pmax) :  | -0.280%/°C |

## PACKAGING CONFIGURATION

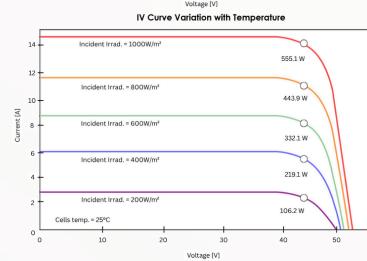
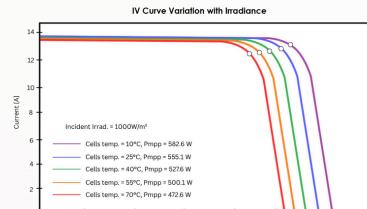
|                       |       |
|-----------------------|-------|
| Container             | 40'HQ |
| Modules per Pallet    | 36    |
| Pallets per Container | 20    |
| Modules per Container | 720   |

**Caution:** Please read the safety and installation instructions before using the product.

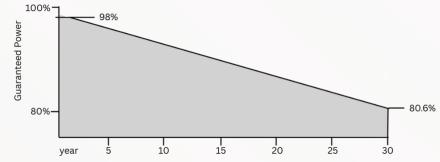
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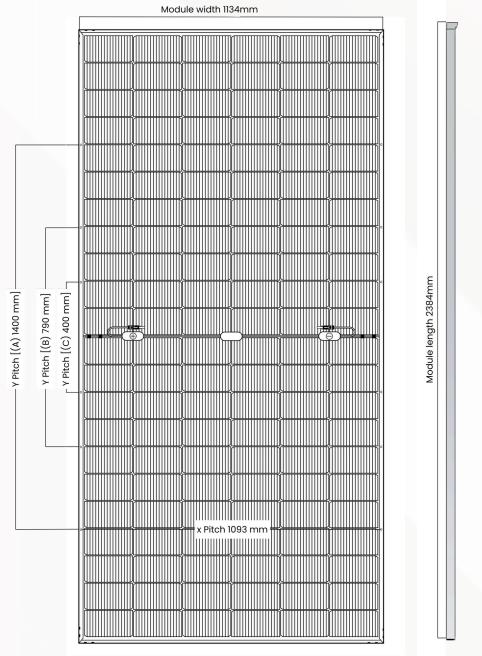
## LINEAR PERFORMANCE WARRANTY:



## DIMENSIONS:

### FRONT VIEW

### SIDE VIEW



# Exhibitions & Industry Presence

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Macwin Solar maintains a strong industry presence through active participation in leading exhibitions and events. We regularly showcase our innovations at major forums like the Renewable Energy India Expo (REI) and Intersolar India. Our booths at these events attract stakeholders from across the solar value chain, reflecting the growing interest in Macwin's solutions. Beyond trade shows, we engage closely with partners through dealer meet-ups and regional industry gatherings, strengthening relationships and sharing knowledge. These efforts have significantly raised Macwin's brand visibility in the Indian solar sector, positioning us as a rising leader and a trusted name in renewable energy.



# OUR USP

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## Manufacturing Excellence

Our facility uses solar technology and automation to boost efficiency, drive innovation, and reduce environmental impact.



## Shipping Excellence

We ensure safe, timely global delivery of solar panels with efficient packaging and streamlined shipping, guaranteeing the product arrives in top condition.



## Quality Excellence

At Macwin Solar, every panel undergoes ISO-certified testing to ensure top quality, durability, and efficiency.



## Certificate

Macwin Solar is fully certified to meet industry standards, guaranteeing top quality and reliability. Our certifications include

# OUR CLIENTS

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# DIRECTOR HISTORY

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## Macwin Solar Energy – A Legacy of Vision and Growth

Macwin Solar Energy traces its roots to the vision of Mr. Bharat Budheliya and Mr. Hardik Budheliya, a first-generation entrepreneur whose journey is defined by resilience, foresight, and the ability to build businesses that serve people and industries alike. Over the years, the Budheliya family has nurtured a diverse portfolio of companies across Gujarat. From JMBC Textile, a trusted name in the textile industry, to MBC Enterprise (Agriculture) with its innovative Kitty Care products, every venture has carried forward the group's core philosophy: deliver quality, earn trust, and create growth that lasts.

Carrying this legacy of entrepreneurship and innovation into the future, Bharat laid the foundation of Macwin Solar Energy Pvt. Ltd. in 2021. His vision was clear to transform Gujarat into a hub of renewable energy and to position India as a global leader in clean power. What began as a modest regional module manufacturing unit has, in just a few years, rapidly scaled into one of Gujarat's fastest-growing solar companies.

Today, Macwin operates a 2,75,000 sq. ft. integrated facility, equipped with advanced AI-driven prediction and automation systems. This state-of-the-art setup allows Macwin to deliver not just panels, but precision-engineered solar solutions that combine high efficiency, durability, and trust. From residential rooftops to large-scale industrial projects, from commercial spaces to agricultural applications, Macwin modules are empowering India to reduce electricity costs while embracing sustainability.

The journey reflects more than just growth – it embodies the Budheliya group's timeless values of integrity, quality, service, and innovation. Every panel manufactured is not only a technological achievement but also a promise to contribute to India's net-zero carbon future. With a scaling capacity aiming towards multi-GW production, Macwin Solar is building more than panels – it is building India's energy independence, panel by panel, project by project.

# INDIA'S LEADING SOLAR PANEL MANUFACTURER

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WE MANUFACTURE  
MODULES FROM

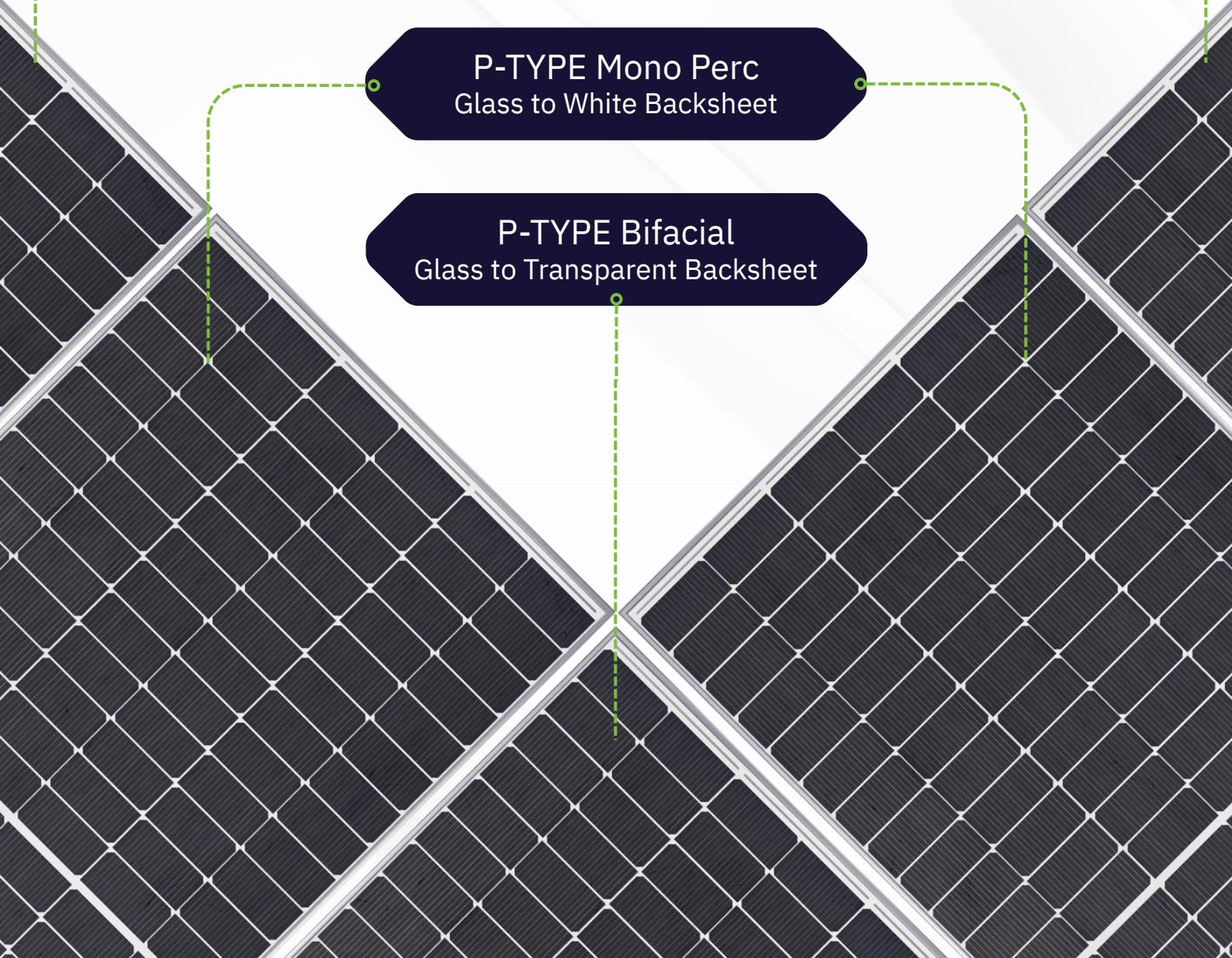
**P-TYPE** 525WP - 560WP  
**N-TYPE** 570WP - 620WP  
**G-12 R** 595WP - 650WP

N-TYPE TOPCon  
Dual Glass (Bi-facial)

G-12R TOPCon  
Dual Glass (Bi-facial)

P-TYPE Mono Perc  
Glass to White Backsheet

P-TYPE Bifacial  
Glass to Transparent Backsheet



# INDIA'S LEADING SOLAR PANEL MANUFACTURER

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2GW State of The Art Manufacturing Integrating World-class Machinery, People & Materials

AI integrated  
production line

PV module manufacturer  
with NABL accredited lab for  
Performance & Reliability testing

State-of-the-art, latest  
technology-based,  
highly efficient N-type TOPCon  
and P-type modules

Specialty Products  
like G-12 and G-12R PV  
modules

## Global Certification

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IEC-61701, IEC-61853-PART-1, IEC-61853-PART-2 IAM & LETID,  
IS -16170 -PART-1, IEC-62716, IEC-62804, IEC 60905, IEC-61215, IEC-63342, IEC 61701, IEC 62716

## MACWIN Awards

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# INDIA'S LEADING SOLAR PANEL MANUFACTURER

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## CONTACT US

Macwin Solar Energy provides dedicated customer support to encourage the adoption of green solutions for sustainability and energy efficiency.

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