



**LADHA**  
RENEWABLES

← →  
EMPOWERING TODAY, TOGETHER

Let the **SUN** pay your bills



# COMPANY OVERVIEW

Laddha Renewables Pvt. Ltd. is the renewable energy venture of the legacy-driven **GL Group**, a name trusted in India for over 57 years across manufacturing and distribution of high-quality building materials. Known for brands like Champion Pipes, Meera Mosaics, Diamond Cornices, and Rachana Fenestras, the group brings deep industrial expertise and execution strength to its forward-facing entry into the clean energy sector.

Headquartered in Bangalore, Laddha Renewables operates a state-of-the-art 70 MW manufacturing facility, producing a full spectrum of high-efficiency solar modules including Mono PERC, TOPCon, Bifacial, and BIPV technologies. Every product is engineered for real-world performance, certified to global standards, and aligned with the Make in India initiative.

We serve residential, commercial, and industrial clients and educational institutions with a strong focus on reliability, scalability, and precision. From rooftop installations to full-scale EPC solutions, our systems are designed to deliver long-term value and energy independence.

Backed by a customer-first philosophy and an in-house R&D ecosystem, Laddha Renewables is committed to powering India's clean energy future—through technology, transparency, and partnerships that last.

## DIRECTOR'S MESSAGE



At Laddha Renewables, we are not just manufacturing solar panels — we are building the infrastructure for energy independence. Our focus has always been clear: to deliver high-efficiency, future-ready solar technology with absolute transparency and reliability.

With over five decades of experience in the building materials industry, our entry into clean energy is not just a shift — it is a natural evolution, driven by the same values that have built long-standing trust with our customers and partners.

From advanced cell technology to export-ready modules, from residential rooftops to industrial-scale EPC, every product we deliver is backed by certified standards, rigorous performance testing, and the ambition to exceed expectations at every level.

Whether you are a homeowner, an industry partner, or a global buyer — we are here to power your progress.

**-Vinay Laddha**  
**Managing Director**



## MISSION

At Laddha Renewables, our mission is to manufacture high-quality, reliable, and efficient solar panels using cutting-edge technology to make clean energy affordable and accessible across urban and rural India. We are committed to advancing India's renewable energy goals by reducing dependence on fossil fuels, fostering innovation and integrity, and partnering with stakeholders to build energy-smart communities. Excellence drives us—from research and development to after-sales service.



## VISION

- To be a leading force in driving India's transition to clean, affordable, and sustainable energy by delivering world-class solar technology, empowering communities, and protecting the planet for future generations.
- Shape a Greener Tomorrow
- To illuminate every corner of India with clean solar energy, making renewable power accessible, reliable, and economically viable for all.
- Global Vision is to be recognized globally as a trusted name in solar innovation, manufacturing excellence, and sustainable energy leadership.



## CORE VALUES

1. **Sustainability** : We put the planet first—designing products that enable a cleaner, greener future.
2. **Innovation** : Constantly pushing the boundaries of solar technology through R&D and smart design.
3. **Integrity** : Transparent practices and ethical operations are the foundation of our business.
4. **Quality** : We deliver durable, efficient, and certified products that stand the test of time.
5. **Customer Focus** : Our solutions are built around client needs—with responsive service and support.
6. **Collaboration** : We believe progress comes through partnerships—with clients, communities, and nature.



# Our Business

# ROADMAP



## 1987

### Product Diversification

- Started “**Meera Mosaics**” - Manufacturing of Designer Floorings.
- Become **Distributors** for **Birla White Cement & Wallputty**.

## 1968

### Foundation

- **GL Group** Established in **Bangalore**.
- Launched “**Champion Pipes**” Rainwater Cement Pipes & Fittings.



## 2000

### Floor to Ceiling Design Solutions

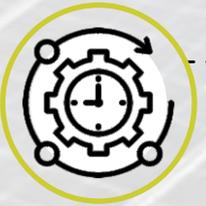
- Launched “**Diamond Cornices**”- Gypsum Cornices & Mouldings under **Mahesh Industries**.
- Expansion in **Exterior Pavers, Paints & Tiles Adhesives** under **Premier Paints**



## 2007

### Ceiling Innovations

- Introduced **Khushi** Brand Grid Ceiling System & PVC Ceiling System.



## 2012

### Doors And Windows Segment

- Introduced **uPVC Doors & Windows** under **Rachana Fenestras & RF Windows**.



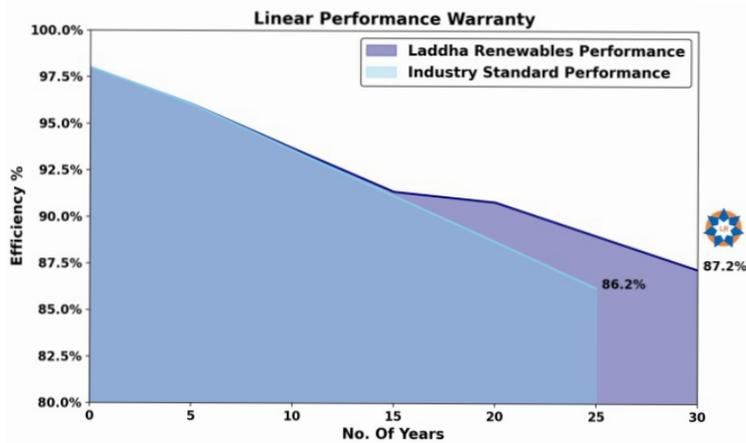
## 2025

### Renewable Energy

- Launch of **Laddha Renewables** Rooftop Solar Panels.
- Featuring **TOPCon** Solar Cell Technology.
- Featuring the Latest **16 Bus Bar** Technology.
- Embracing **Make In India** and **Customer First** approach.



# SOLAR PANEL PERFORMANCE GRAPH



## COMPANY WARRANTY



**1-year** Free after-sales service



**15-Years** Manufacturer's Warranty for Solar Panels



**25-Years** Performance Warranty for Solar Panels providing atleast 76% nominal output.

## CERTIFIED BY

IS 14286  
IEC 612155 : 2005  
IS/IEC 61730-1:2004  
IS/IEC 61730-2:2004



9001: 2015  
14001: 2015  
45001: 2018



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**#startupindia**  
DIPP204515





## HIGHLIGHTS

- Fully-automatic facility with leading technology



Up to 30% Additional Power Gain when compared with conventional P-type module



No LID Loss - Higher power generation



Better Output In Low Irradiance- Higher power output even under low-light environments like on cloudy or foggy days



Better Temperature Coefficient- Higher power generation under higher ambient temperature conditions



Bifaciality Factor  $80 \pm 5\%$

- Best -in class durability and reliability

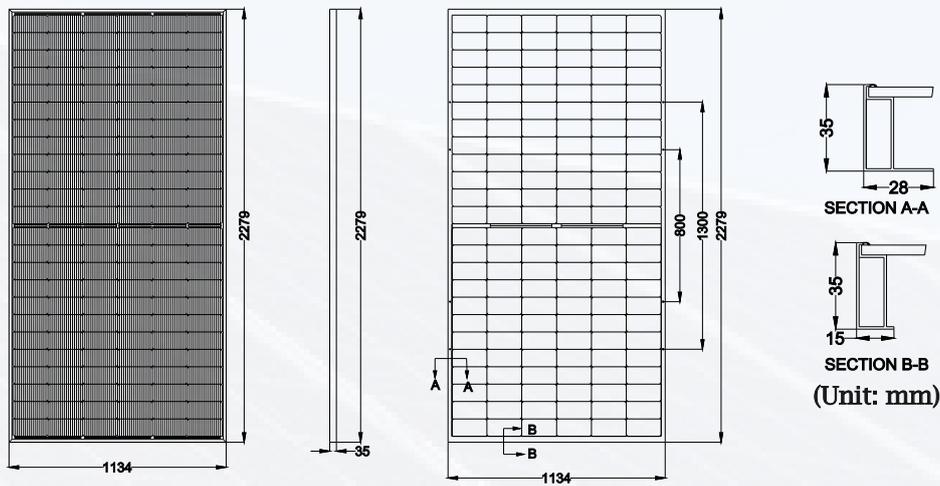
**590~610 + Wp**  
Minimum Power Output

**↑24.8%**  
Minimum Efficiency

**0~+5W**  
Power Tolerance

### Your Green Impact at a Glance (Per kW of Capacity)

-  Helps Eliminate 30.5 Tonnes of CO<sub>2</sub> – That's like taking 7 cars off the road for a whole year!
-  Equals Planting 49 Trees – Just 1 kW can make a huge difference for our planet!



## 590 W ~ 610+W

144 N-Type TOPCon Bifacial High Efficiency Cells

**2279x1134x35mm**  
Dimensions

**33kg**  
Weight

**144**  
Solar cell

**0~+5W**  
Power Tolerance

### Electrical Characteristics (STC)

Type	LR-590TBF	LR-595TBF	LR-600TBF	LR-605TBF	LR-610TBF
Nominal output	590 Wp	595 Wp	600Wp	605Wp	610Wp
Nominal voltage V <sub>mpp</sub>	48.17 V	48.31 V	48.53 V	48.79 V	48.82 V
Nominal current I <sub>mp</sub>	12.26 A	12.32 A	12.37 A	12.45 A	12.54 A
Short circuit current I <sub>sc</sub>	14.11 A	14.22 A	14.25 A	14.28 A	14.30 A
Open circuit voltage V <sub>oc</sub>	52.72 V	52.88 V	52.98 V	53.05 V	53.21 V
Module conversion efficiency	24.80 %	25.00 %	25.20 %	25.50 %	25.70 %

\*at standard conditions (STC) irradiance 1000 watt/m<sup>2</sup>, spectrum Air Mass 1.5 at a cell temperature of 25°C

### \*Bifacial Output -Backside Power Gain

10% Power output	649Wp	655Wp	660Wp	666Wp	671Wp
Module Efficiency	27.28%	27.50%	27.72%	28.05%	28.27%
20% Power output	708Wp	714Wp	720Wp	726W p	732Wp
Module Efficiency	29.76%	30.00%	30.24%	30.60%	30.84%
30% Power output	767Wp	774Wp	780Wp	787Wp	793Wp
Module Efficiency	32.24%	32.50%	32.76%	33.15%	33.41%

\*Bifaciality Factor : 80% + 5%

### Thermal Performance

Voltage V <sub>oc</sub>	-0.300%/°C
Current I <sub>sc</sub>	0.046%/°C
Output P <sub>mp</sub>	-0.250%/°C
NOCT(nominal operating cell temperature)	43°C +/- 2°C

### Mechanical & Safety Specifications

Design Load	3600 Pa / 1600 Pa *
Test Load	5400 Pa / 2400 Pa *
Maximum system Voltage	1500 VDC
Protection Class	C(UL790)/II

\* depending on the type of installation according to the installation instructions



## HIGHLIGHTS

• Fully-automatic facility with leading technology

• Best -in class durability and reliability



SMBB Technology Half-Cut N-Type Cell



Anti PID



100% Visual Electroluminescence  
Inspection in Production



Excellent Low-Light Performance



Strengthen Mechanical Load



PV Facade with innovative composition

**110~400+W<sub>p</sub>**

Minimum Power  
Output

**↑15 %**

Minimum Efficiency

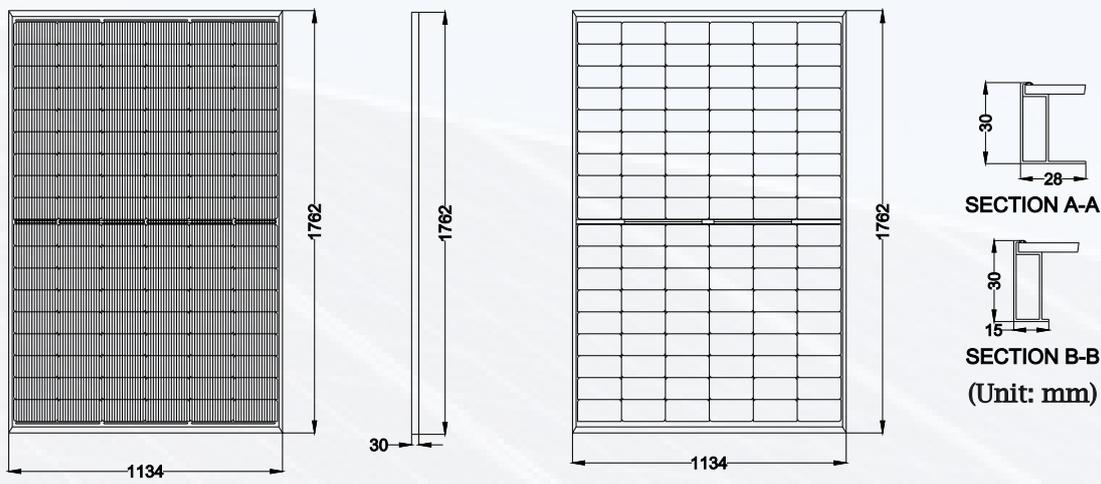
**0~+5W**

Power Tolerance

### Your Green Impact at a Glance (Per kW of Capacity)

 Helps Eliminate 30.5 Tonnes of CO<sub>2</sub> – That's like taking 7 cars off the road for a whole year!

 Equals Planting 49 Trees – Just 1 kW can make a huge difference for our planet!



# 110 W ~ 400+W

108 N-Type TOPCon BIPV Module High Efficiency Cells

**1762x1134x30mm**  
Dimensions

**21.5kg**  
Weight

**108**  
Solar cell

**0~+5W**  
Power Tolerance

## Electrical Characteristics (STC)

Type	LR-110BIPV	LR-135BIPV	LR-390BIPV	LR-395BIPV	LR-400BIPV
Nominal output	110 Wp	135 Wp	390Wp	395Wp	400Wp
Nominal voltage V <sub>mpp</sub>	17.30 V	22.03 V	34.72 V	34.91 V	35.10 V
Nominal current I <sub>mpp</sub>	6.36 A	6.13 A	11.25 A	11.33 A	11.41 A
Short circuit current I <sub>sc</sub>	6.58 A	6.45 A	12.12 A	12.21 A	12.30 A
Open circuit voltage V <sub>oc</sub>	20.02 V	25.31 V	40.35 V	40.59 V	40.83 V
Module conversion efficiency	15.40 %	16.67 %	19.50 %	19.80 %	20.00 %
Panel Size	1408*438*6.2mm	2000*422*25mm	1762*1134*30mm		
Weight	8.5 Kg	9.3Kg	21.5Kg		
Solar Cell	28 Cells	36 Cells	108 Cells		

\*at standard conditions (STC) irradiance 1000 watt/m<sup>2</sup>, spectrum Air Mass 1.5 at a cell temperature of 25°C

## Thermal Performance

Voltage V <sub>oc</sub>	-0.250%/°C
Current I <sub>sc</sub>	0.045%/°C
Output P <sub>mpp</sub>	-0.290%/°C
NOCT(nominal operating cell temperature)	45°C +/- 2°C

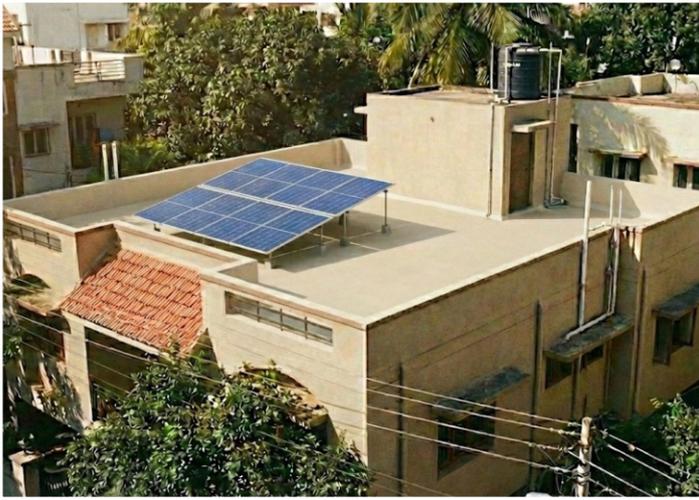
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# OUR PROJECTS IN &

**Residential, Commercial & Industrial**

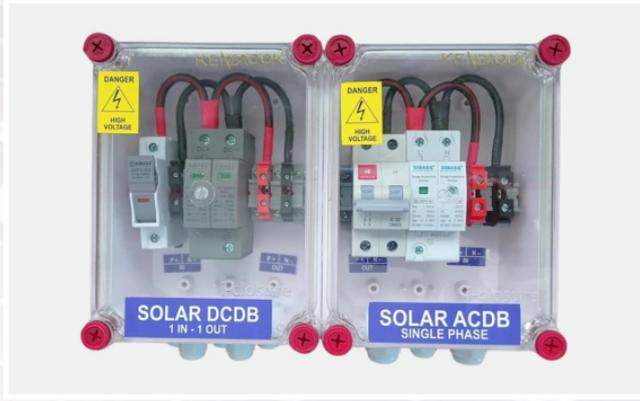
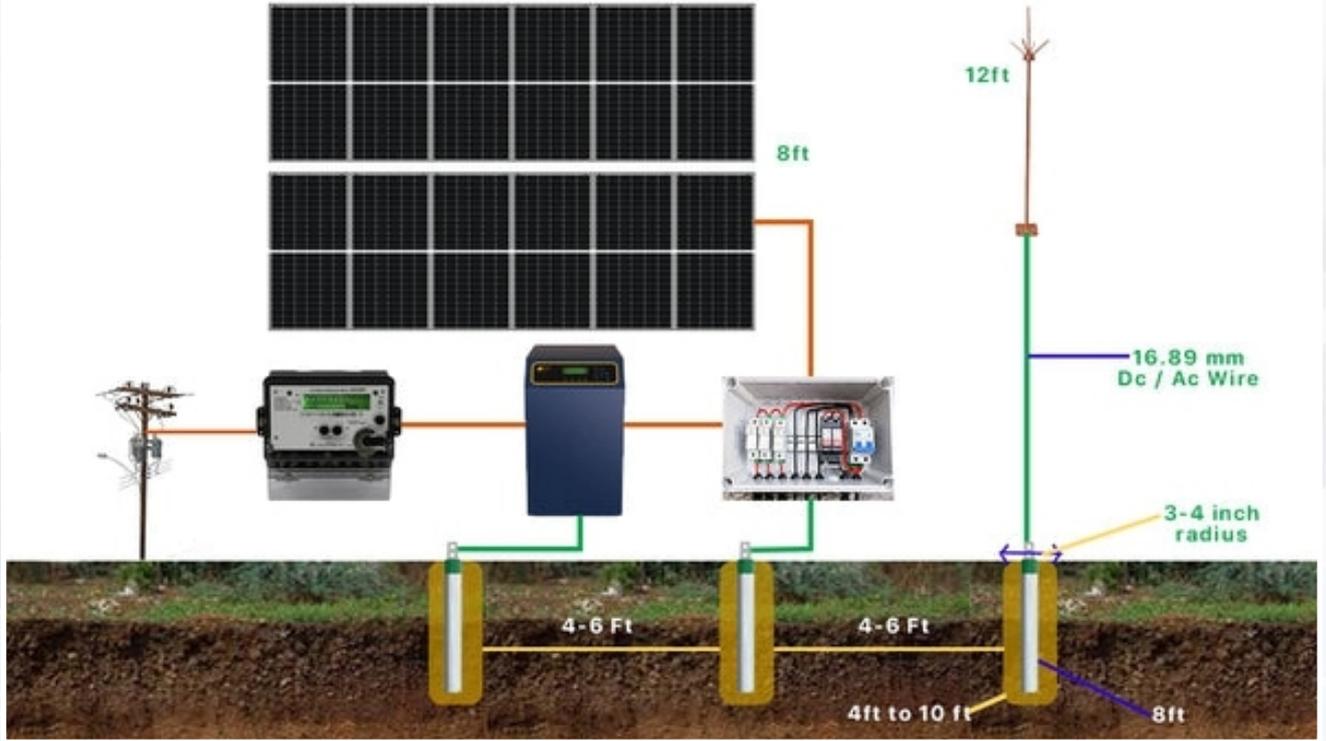


# AROUND BENGALURU



INTRODUCING BIPV PANELS SHORTLY

# OUR ACCESSORIES



## Our Partner Brands



### Laddha Renewables Pvt Ltd

No. 21-C, K.I.A.D.B Industrial Area,  
Kumbalgotu 2nd Phase,  
Bangalore 560074, India



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