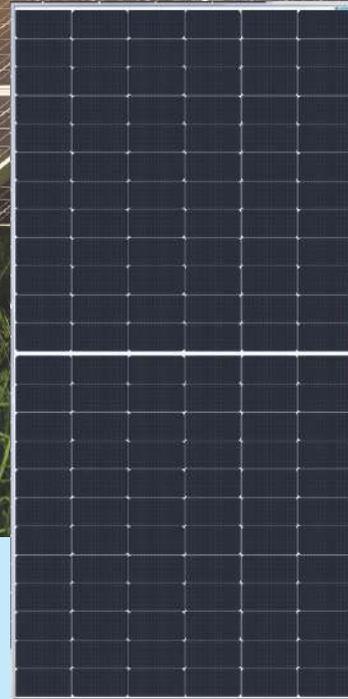


**G12R PV MODULE**

600-635 Wp

**M10R PV MODULE**

505-560 Wp



Industry- Leading Efficiency upto **23 %**  
**16 BB Technology with Half Cut Cells**  
**Non-Destructive Cell Cutting (NDC)**

**Key Features of TOPCon Modules****High Savings**

Faster return on investment with Levelized Cost of Energy (LCOE)

**Superior Efficiency**

Excellent module conversion efficiency upto 23% for maximum output

**10-30% Additional Power Output**

Generates 10-30% more energy compared to regular modules

**Built for Harsh Conditions**

Specifically designed to withstand India's Climate Challenges-heat, dust, humidity and strong winds

**Precision Manufacturing**

Produced on a fully automated production line with 100% inline Hi-Pot testing and dual EL inspections for quality assurance

**Advanced TOPCon Technology**

Offers higher conversion efficiency compared to earlier PERC modules

**Lower Degradation Rate**

Has lower degradation rate over its lifespan, with a first-year degradation of 1%, compared to 2% for a PERC module

**Improved Low-Light Performance**

Delivers higher power generation even in low-illumination conditions such as cloudy or foggy weather

**Negligible LID (Light Induced Degradation)**

Utilizes N-Type technology that minimizes both LID and LeTID, ensures long term performance stability

**PID Resistance**

Excellent Anti-PID Performance guarantees limited power degradation enhancing overall system yield

## # TECHNOLOGY COMPARISON : TOPCON V/S PERC

Sr. No.	Features	TOPCON (Tunnel Oxide Passivated Contact)	PERC (Passivated Emitter and Rear Cell)
1	Degradation Rate	Has a lower degradation rate, often around 0.4% per year	Has a faster degradation rate, typically around 0.5% per year
2	Efficiency	Higher, 22-24%, Ultimately output power generation is high	Lower, 20-22%, Low output power generation
3	Performance in High Temperatures	Better. Less power loss in hot weather	Low, More power loss in hot weather
4	Lifespan	Long-lasting. Warranties are often for 30 years.	Typical lifespan of 25 years.
5	Bifacial Capability	Higher with efficiency 80%, captures sunlight from both front and rear	Lower, with efficiency 70% compared to TOPCon

Above comparison shows that, TOPCon has many advantages and it is superior technology accepted world wide, replacing PERC Technology

## # TECHNOLOGY COMPARISON : GLASS TO GLASS V/S GLASS TO BACKSHEET

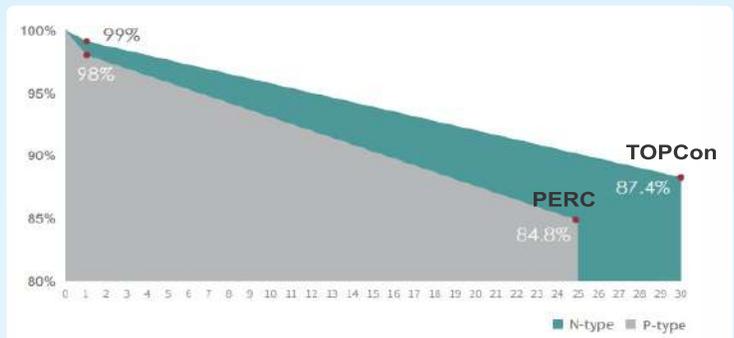
Sr. No.	Features	Glass to Glass	Glass to Backsheet
1	Environment friendly	Glass is eco-friendly material	Backsheet is made up of plastic.
2	Degradation of material	Degradation of glass is low ensuring high power output for long term.	Degradation is high in case of backsheet
3	Suitable Regions	Hot & humid climate regions such as Indian Subcontinent	Suitable for cold & dry climate regions such as Europe, US and Australia
4	Enhanced Durability	Superior protection against moisture, temperature variations and mechanical stress	Inferior protection against moisture, temperature variations and mechanical stress
5	Heat Dissipation	Additional glass layer helps dissipates heat more efficiently	Backsheet dissipates heat less efficiently

# Above comparison is based on data compiled from various websites and research publications

### MODULE FEATURES :

Parameters	G12R	M10R
Number of Cells and Cell Type	132 Half Cut TOPCon Solar Cells	144 Half Cut TOPCon Solar Cells
Dimensions: (L X W X H)	2382*1134*30	2278*1134*30
Weight	33.5 Kg	32.5 kg
Front Glass	2 mm HTAR high transmission solar glass	
Embedding	EPE	
Maximum Reverse Current	30A	
Back Glass	2 mm High Transmission Solar Glass	
Junction Box	3 Split Junction Box Ip68	
Number of Bypass Diodes	3	
Cables	4mm <sup>2</sup> Solar Cables, Length 400mm ±10 mm	
Connectors	MC4 Compatible	

### MODULE DEGRADATION CURVE



MODULE DEGRADATION RATE	TOPCon	PERC
1 <sup>ST</sup> YEAR DEGRADATION	1%	2%
YEAR 2-30 DEGRADATION	0.40%	0.50%
END OF 30 YEARS	87.40%	84.80%

### WARRANTY

Product Warranty	12 Years *
Performance Warranty	30 Years *

For more technical details about module, please visit our website.

\*T&C Apply



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