Established in 2015
Innovation and Technology are the company's core strengths

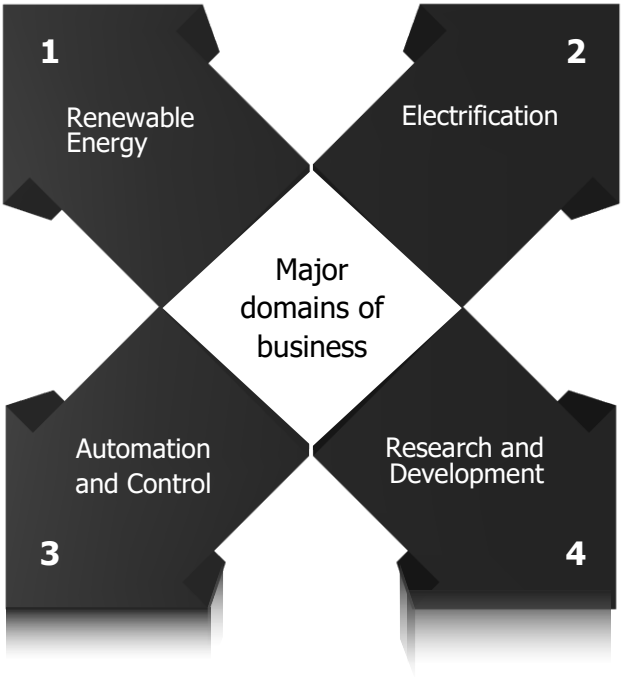
Innovation is passion

Well-trained, qualified, and experienced core team Over 120 + installations (Rooftop & Ground mounted)

Experience on international business and exposed to the best of the latest technology

End-to-End solar energy solution provider including EPC

- Solar
- Micro wind power
- Project consultancy



- Commercial buildings
- Industrial buildings
- Projects
- Plants

- Product automation
- Plant automation
- SCADA
- Artificial Intelligence (AI)

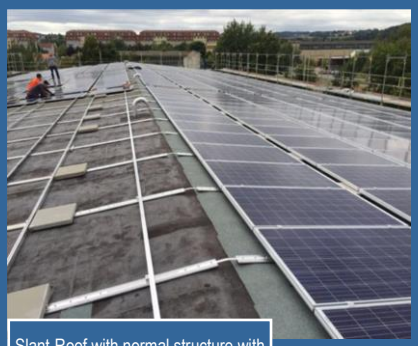
- Inventions
- Product development
- Quality assurance
- Cost control

Ground mounted solar plant with Mono-Facial modules

Ground mounted solar plant with Bi-Facial modules

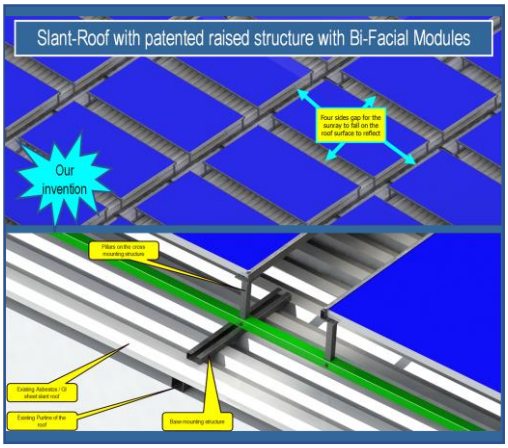
Agri-Ground mounted solar plant with Mono / Bi – facial modules

Flat Roof-Top with raised pillars with Mono / Bi-Facial modules



Slant-Roof with normal structure with Mono-Facial Modules

Slant-Roof with patented raised structure with Bi-Facial Modules



EZON®
Dual Axis Solar Tracker

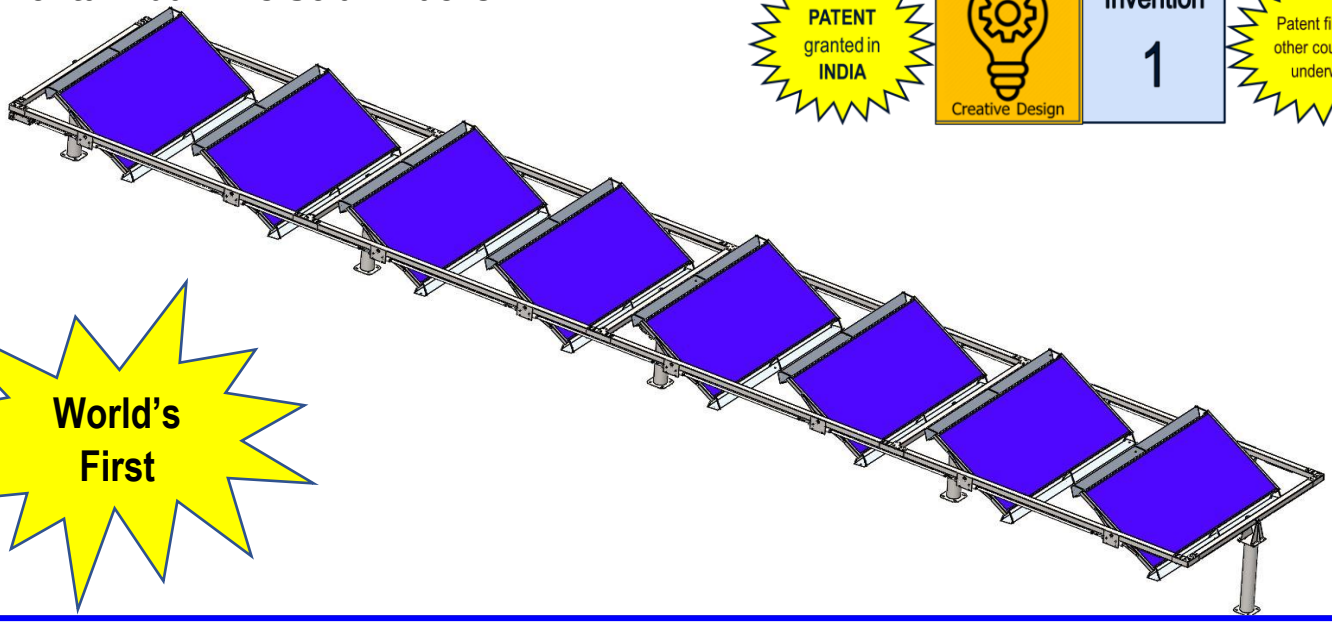
Horizontal Dual-Axis Solar Tracker

PATENT granted in INDIA

Creative Design

Invention 1

Patent filing in other countries underway



World's First

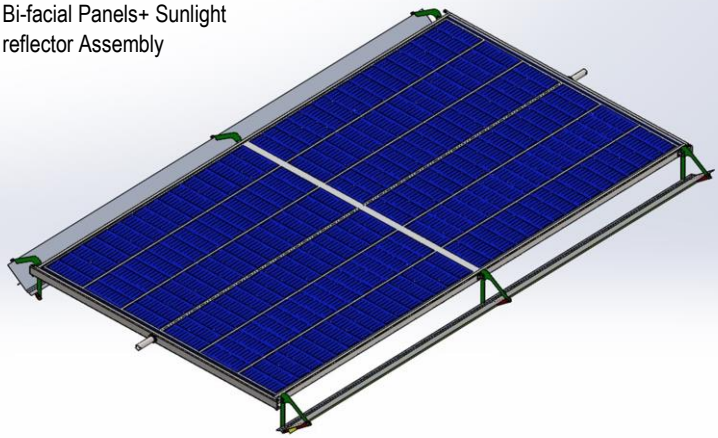
PATENT granted in INDIA

Creative Design

Invention 2

Patent filing in other countries underway

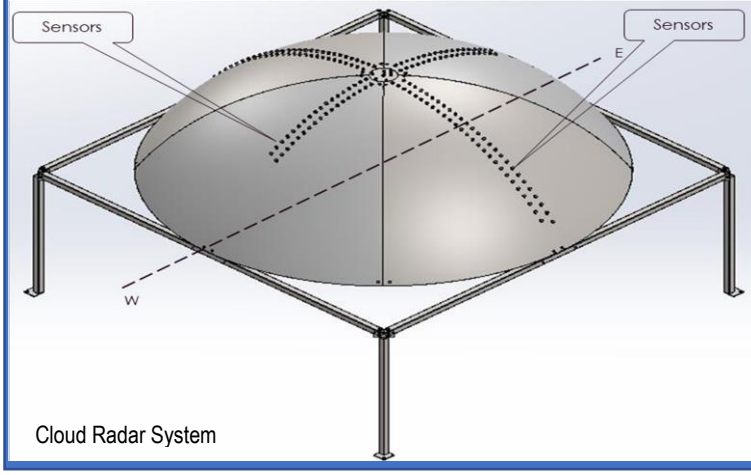
Bi-facial Panels+ Sunlight reflector Assembly



Invention 3

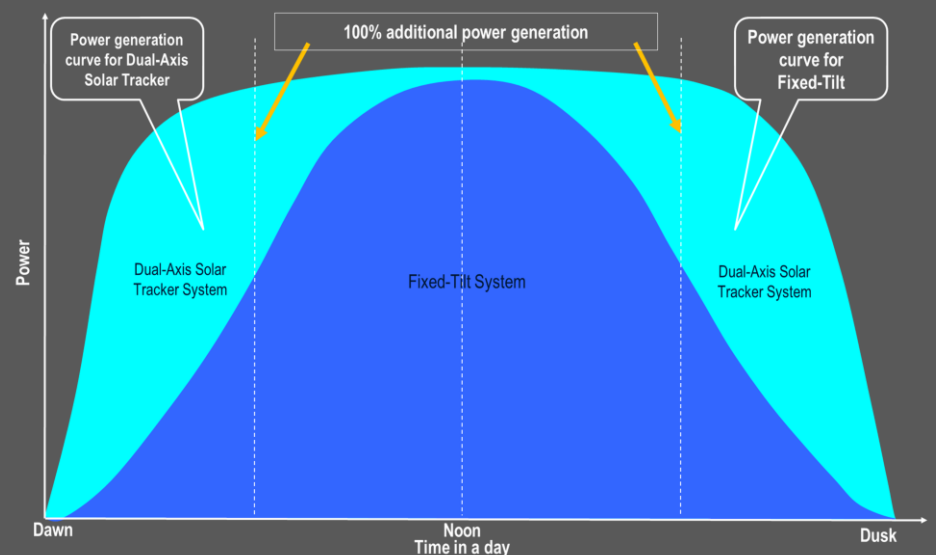
ARTIFICIAL INTELLIGENCE

PATENT Pending in India



Cloud Radar System

Comparison of Power Generation Curves

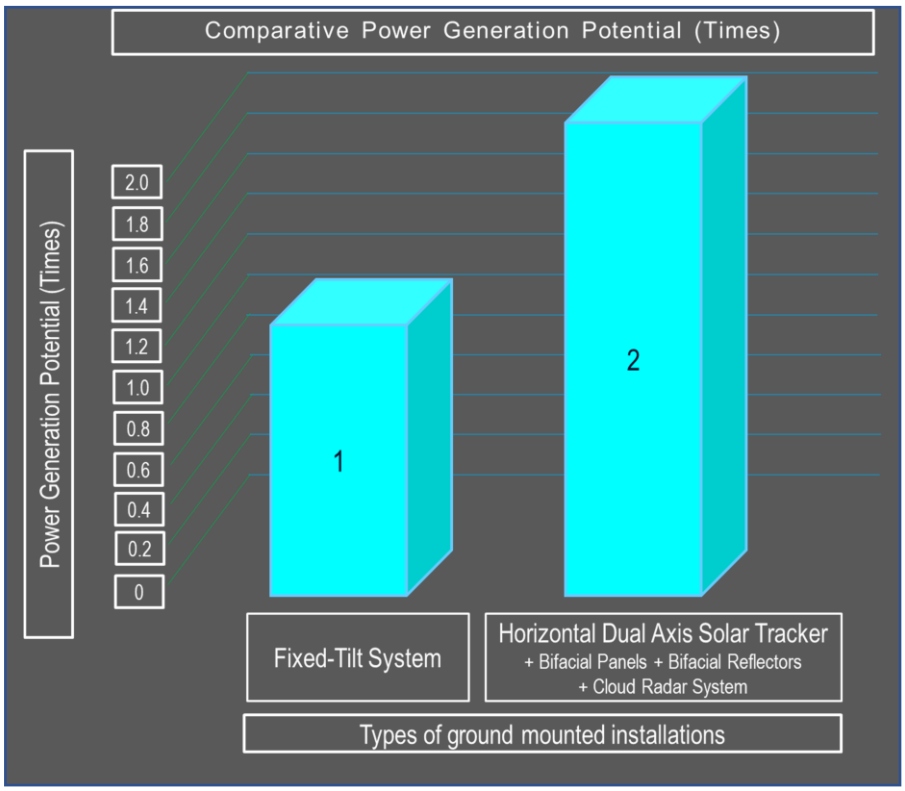


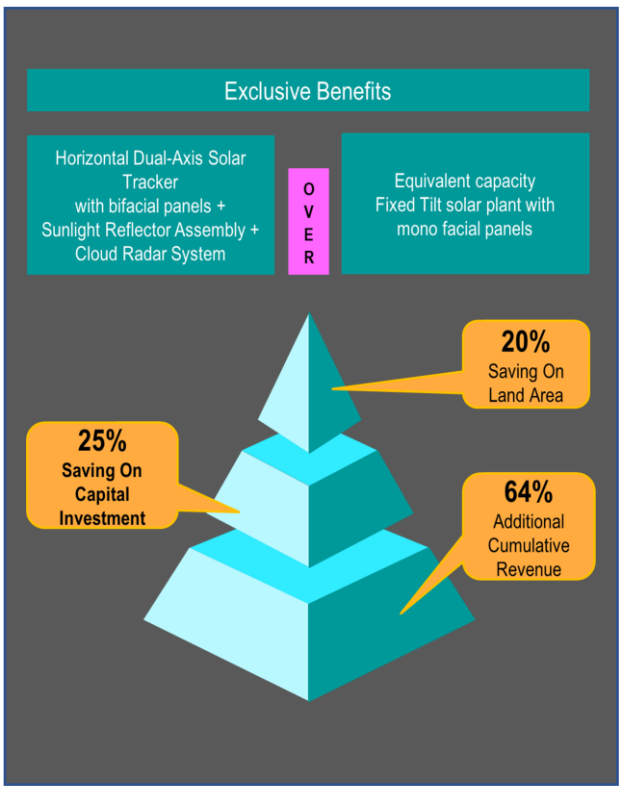
Unmatchable in the industry

Highest IRR

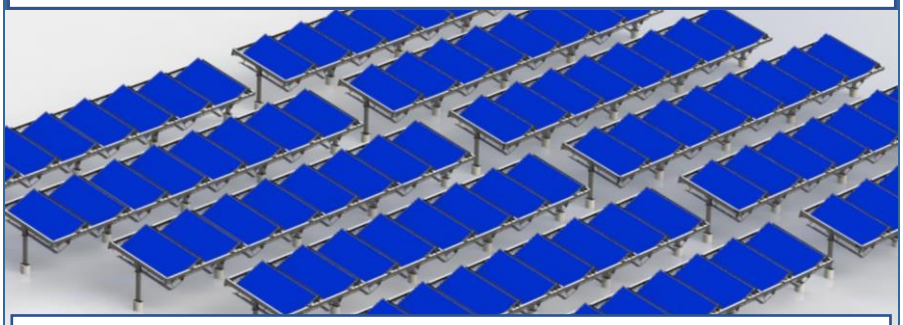
Lowest LCoE

EZON
Dual Axis Solar Tracker



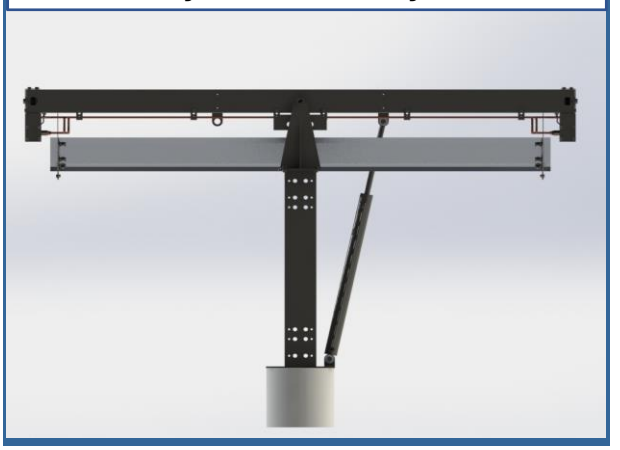


Revolution



Revolution In Photovoltaic Solar Power Generation
Average output recorded 30 Lakhs Units / Year / MWp
(For a location irradiance of 5.05 kWh/m2/day and for a latitude angle 11 degrees

All hydraulic drive system



Invented by **Dr.S.K.Radhakrishnan**, Founder and Managing Director of **Ezon Energy Solutions P Limited**

EZON®
Dual Axis Solar Tracker

Technical Specifications

Construction	
Name of our Horizontal Dual Axis Solar Tracker	Integrated Tilting Solar Tracker (iTST)
Model	S.A.V.I. 23
Number of axes of tilting	2 axes (Dual-axis) (Primary Axis -Horizontal - for E-W tilting & Secondary Axis - normal to the primary axis - for N-S tilting)
Number of SPV modules per independent row	8 No.s (Bifacial Panels) + (1 Sunlight Reflector Assembly / Each Bifacial Panel)
Row Architecture	Every row is independent. Can be clustered in series and or in parallel to cover the area of installation to meet the total installed capacity
Design and principle	Integrated Tilting Solar Tracker (iTST) is designed and constructed in the principle of 'Horizontal Primary Dual Axis Solar Tracker (HPDAT)'
Type of Solar Photovoltaic Panel adoptability	(iTST) is constructed to accommodate any Bi-facial panels of any capacity (wattage) and any size (Length & Breadth)
Solar Photovoltaic Module Orientation	Portrait (with respect to the primary axis - Horizontal - for E-W tilting)
Type of Installation suitability	Ground Mounted / Flat RCC Rooftop
Tracker Structure Construction	Ready-To-Assemble (RTA) Concept. Hot-dip galvanised
Typical dimensions	
Height @ Maximum Tilt	2.77m (Vary as per the capacity and size of the SPV Panels used) (From the ground level)
Height @ Stow Position	1.64m (From the ground level)
Pitch distance Between 2 Rows	5.00m (E-W) (Typical) (Location specific)
Pitch distance Between 2 pillars in a row	4.00m (Typical) (Location specific)
Minimum free space between two rows	2.36m (E-W) (Typical) (Location specific)
Maximum free space between two rows	3.50m (E-W) (Typical) (Location specific)
Pitch distance between 2 SPV panels	2.00m (N-S) (Typical) (Location specific)
Minimum free space between two SPV panels	0.40m (N-S) (Typical) (Location specific)
Maximum free space between two SPV panels	0.60m (N-S) (Typical) (Location specific)
Minimum Ground clearance @ Maximum tilt (60°)	0.46m (N-S) (Typical) (Location and design specific)
Length of a single row	16.07m (Typical) (Location specific)
Width of a single row	2.78m (Typical) (Location specific)
Land adoptability	
Land undulations	Flexible to accommodate land undulations (could be custom designed – land specific) on E-W & N-S directions
Land slope	Flexible to accommodate land slope (could be custom designed – land specific) on E-W & N-S directions
Land geometry	Flexible to accommodate any land geometry to minimize the land wastage
Limits of tilting angles	
Reference	Lat-Long of the location of the solar plant
E-W Tilting angle range (Primary axis)	Up to (+ / -) 60° per day (Typical-can be customised)
N-S Tilting angle range (Secondary axis)	Up to (+ / -) 36° per day (Typical-can be customised)
Tilting tolerance	< 1° (for both E-W and N-S tilting)
Back tracking	
Integrated Back Tracking (N-S) & (E-W)	Backtracking effective for both E-W and N-S (Integrated tilting)
Bearings and lubrication	
Types of bearings	Journal (Synthetic) bearings
Safety and maintanance stops	
Emergency, wind speed limit, cleaning and stow stops	Provided
Foundation pillar support	
Number of foundation pillars per Row & foundation type	5 (Typical-can be customised). Pillar reinforced pile concrete foundation for highest strength, stability & sturdiness - Proprietary Design
Number of Foundation pillar to Number of SPV panels ratio	(1:1.6) ONE foundation pillar for every 1.6 SPV Panels offers additional ground grip resulting in increased stability
Electro-mechanical drives	
E-W tilting (Each Row) (Primary Axis)	2 no.s of synchronous hydraulic cylinder-piston tilting systems per row
N-S tilting (Each SPV Panel) (Secondary Axis)	2 no.s of synchronous hydraulic cylinder-piston tilting systems per row
Electrical and electronics	
Power source	Centralised Power Source coupled with an alternate standalone power source supported by 100% battery back up
Operational Temperature Range	(-20° C to + 60° C) (Can be customised based on the input design conditions)
Power Consumption	< 0.50 % of the power generation (Typical)
Data communication	
Communication Protocol	RS485
General	
Algorithm	Proprietary Integrated Algorithm for E-W and N-S Tilting angles
Tracker Control System and tracker controller	Centralised tracker controller system [Hybrid (Open loop + Closed loop) Control System]
Cloud management for better yield	Cloud Radar System (CRS) to navigate the tracker during cloudy or over cast to maximise power generation
Special features	
Torsional Stability & Sturdiness of the tracker structure	1 pile foundation pillar per 1.6 SPV panels assures highest strength, torsional stability and sturdiness for the solar tracker structure
Wind resilience	The 'gap' maintained between the two adjacent SPV Panels in our patented design mitigates the wind speed to ensure better wind resilience
Avoids stockpiling of snow and sand mass	The 'independent tiltability' of each PV Panels in our patented design avoids the stockpiling of 'snow' and / or 'sand'
Better safety index	The iTST's maximum tilt height is kept within the lower wind velocity zone to assure better safety index.
Temperature of the Panels	Since there is a provision for free flow of air (wind) between each panels, the temperature of the panels are always kept at the least for better yeild
Robot cleaning system usage	iTST's frame design is best suited to accommodate robot cleaning system
Remote monitoring and control	Remote monitoring is customised based on customer requirement
All design parameters are subject to change. The design prevails at the time of delivery to be noted.	

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CIN No. U40106TZ2015PTC021544. GSTN: 33AAECE0009N1ZX

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