

# EXPERT IN GREEN SMART MANUFACTURING ALL-SCENARIO PV MOUNTING SYSTEM SOLUTIONS

Reliable Support Sustainable Future

### Headquarters

5th Floor Times Building No. 1 Zhanbei Road East High-speed Railway Station Jiawang District Xuzhou City, Jiangsu Province

### **Beijing Marketing Center**

Times Fortune Tiandi, Tower B, No. 1 Hangfeng Road, Fengtai District, Beijing, China

### **Shanghai Marketing Center**

7/F,Dongsheng Digital Port,No.1999 Shenkun Road,Minhang District,Shanghai,China

### **Jinan Marketing Center**

Room 811, 8th Floor, Building J3 Wanda Plaza Office Tower Lixia District Jinan City Shandong Province

### Jeddah Production Base (Saudi Arabia)

JNMA6483, 6483, Al-Nubqain, Al-Marsi District, Jeddah 22756, Saudi Arabia

### **Qingdao Production Base (China)**

Wuyu Road South Side Industrial Park, Jiaobei Subdistrict Office, Jiaozhou City, Qingdao, Shandong Province, China

### **Xuzhou Production Base (China)**

No. 109 Jingang Road, Economic Development Zone, Xuzhou, Jiangsu Province

Longtai Industrial Park, Jiawang District, Xuzhou, Jiangsu Province

No. 55 Jingshan Road, Economic Development Zone, Xuzhou, Jiangsu Province

Damiao Subdistrict, Jiawang District, Xuzhou, Jiangsu Province

Yunhewan Technology Industrial Park, Economic and Technological Development Zone, Xuzhou, Jiangsu Province

Tongshan District, Xuzhou, Jiangsu Province

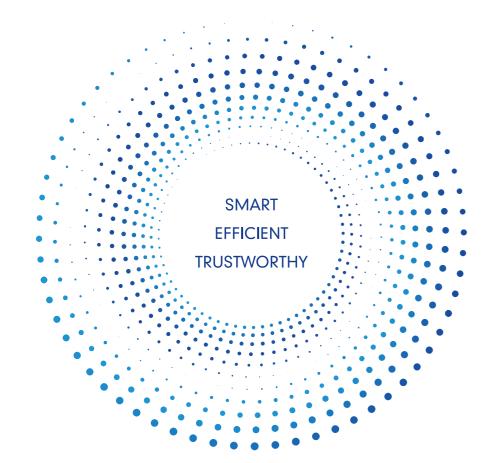


Jiangsu Evershine Energy Technology Co.Ltd.

⊕ www.esetsolar.com 

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# 1 WHO WE ARE

Company Profile

Milestone

Global Layout

# ) WHAT WE DO

Products & Solutions

Eseek-Steady 1P Solar Tracker

Eseek-Twins 1P Solar Tracker

Eseek-Strider 1P Solar Tracker

Eseek-Climber 1P Solar Tracker

Exceed 2P Solar Tracker

Fixed Adjustable Mounting System

PV Flexible Mounting System

# 03 WHY US

Advantages

Quality Control

The Efficient and Resilient Supply Chain

Power Transmission and Substation

**Customer Services** 

Responsibility

Global Cases



# WHO WE ARE



Redefining the boundaries of LCOE with digital intelligent PV mounting systems

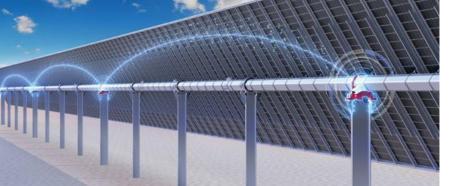


To be the preferred global partner for PV industry



Earnest | Openness | Courage | Responsibility





EXPERT IN GREEN SMART MANUFACTURING & ALL-SCENARIO PV MOUNTING SYSTEM SOLUTIONS

RELIABLE SUPPORT SUSTAINABLE FUTURE

# MILESTONE

METAVAST Group is an innovative enterprise oriented by customer needs and led by technology research and development.

After more than 40 years development, METAVAST has become now a comprehensive group with 19 Subsidiaries and Affiliates, dedicating to provide one-stop solutions for customers in 8 business units:new power system, metal processing, metal surface treatment, inteligent coating equipment, laser equipment, new materials, solar tracking &energy storage system, as well as industrial vertical e-commerce.

ESET SOLAR is a key component of METAVAST Group's strategic layout in the energy sector, building on the Group's profound expertise accumulated since 2008 in material science, power structure design, and energy solutions.

19 Subsidiaries and Affiliates

3000<sup>+</sup>Employees 400<sup>+</sup>R&D Engineers

60 Countries Reached

# 2017



RITMAN is an intelligent equipment company. Coating technology and equipment: Batch galvanizing line: General, Blowing, Centrifugal Continuous galvanzing line: ZAM, GI, GL, etc. Laser cutting machine

# 2019



Specialized in manufacturing various types of tube & screw pile.

# 2022 **VOYAGE**



founded Qingdao Yongruixiang, Establish a specialized production base with an annual output of 80,000 tons of angle steel towers and an annual galvanizing capacity of 160,000 tons.

# 2023 CULTIVATE



Is a leading manufacturer of ZAM(Zn-Al-Mg) materials widlely used for solar, construction, auto, electrical, agriculture & animal husbandry, traffic, etc.

# ROOTS 1984-2007

# **FRAMEWORK** 2008-2016

WEAVE 2017-2021

# **GLOBALIZE**

2022-Future

### **METAVAST** 恢弘集团

### **METAVAST Group Development History**

# 1984

Our venture began with Dahuangshan Galvanizing Plant, rooted in metal surface treatment

## 2008



China's leading hot dip galvanizing service company 40+ years Anti-corrission experience since 1984 10 environmental automatic galvanizing lines.

# 2009



Is an industry leader in designing, manufacturing and supplying Steel pole, Steel tower, Steel tube tower, Substation steel structure & Gantry, Steel structure for power, telecom, lighting, etc.

# 2021



Is an industrial vertical e-commerce platform for galvanizing steel products, fasteners and accessories for Power and PV industry etc.



Focusing on PV tracking mounts, fixed mounts, and EPC services, with an annual production capacity of 30GW, we provide comprehensive mounting solutions for all scenarios.

# 2022-2024 ADVANCE

Establishing a Dubai marketing center to kick off its global expansion.

Establish marketing centers in Beijing, Shanghai, and Jinan to enhance the domestic marketing network.

# 2025 INTEGRATE

Ritman Egipment commences its IPO; The Jeddah, Saudi Arabia factory begins production, establishing a China-Saudi dual manufacturing hub; Subsidiary companies are established in Saudi Arabia, Spain, and Brazil, alongside a global headquarters in Riyadh, achieving global expansion with localized operations.

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# **GLOBAL LAYOUT**



### **SALES CENTER**

Peking, China Shanghai, China Jinan, China Riyadh, Saudi Arabia Sao Paulo, Brazil Madrid, Spain

### MANUFACTURING BASE

Xuzhou, China Qingdao, China Jeddah, Saudi Arabia Tianjin, China Kunming, China etc.

### **GOLBAL SERVICE CENTER**

Hanoi Office, Vietnam India Office Philippine Office Hungary Office Mexico Office Dubai Office The headquarters and R&D center of ESET are located in Jiangsu, China. With its innovative intelligent solar tracking systems, ESET is rapidly emerging as a strong force in the global photovoltaic industry, establishing a global strategic layout with international marketing centers in China, Saudi Arabia, Spain, and Brazil, and manufacturing centers in China and Saudi Arabia.

By the end of 2024, ESET's cumulative shipments will exceed 40GW, completing over 500 projects in more than 50 countries and regions worldwide, and securing a leading position in markets such as the Middle East, South America, Australia, and Southeast Asia.

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# **ABOUT US**

Founded in 2021, ESET is a global leader in green smart manufacturing and all-scenario PV mounting solutions. Currently, the company boasts six major manufacturing bases in Xuzhou (Jiangsu), Qingdao (Shandong), Tianjin (China), Kunming (Yunnan), and Jeddah (Saudi Arabia) etc. along with 12 smart factories, totaling an annual solar mounting production capacity of over 30GW.

Leveraging its vertically integrated manufacturing capabilities and comprehensive industrial chain support system with a global footprint, ESET ensures end-to-end quality control of solar mountings—from raw materials to finished products. It responds to the needs of customers across China and around the globe, delivering smart, efficient, and reliable products and services.



6 Production Base 12 Smart Factory 30 GW+

40 GW+

50<sup>+</sup>
Business Country

500<sup>+</sup>

# WHAT WE DO

# EXPERT IN GREEN SMART MANUFACTURING ALL-SCENARIO PV MOUNTING SYSTEM SOLUTIONS

### **ENERGY**

Leading the New Energy Race
Driving Technological Breakthroughs
in the Photovoltaic Industry
Building a Green and Sustainable
Future Together

### **SMART**

Building Digital Energy Management
Creating the Future Smart Energy
Storage Ecosystem
Flexibility Adaptability Predictability

### **EFFICIENT**

Establish a Rapid Response Mechanism
Build a Globally Integrated Service
Network
Enhance Quality and Transformation
Efficiency Pioneer New Frontiers of Value

### TRUSTWORTHY

End-to-End Quality Control System
On-site Technical Empowerment by
Expert Teams
Over 500 Projects Delivered
The Trusted Choice of Global Users

# PRODUCT & SOLUTIONS





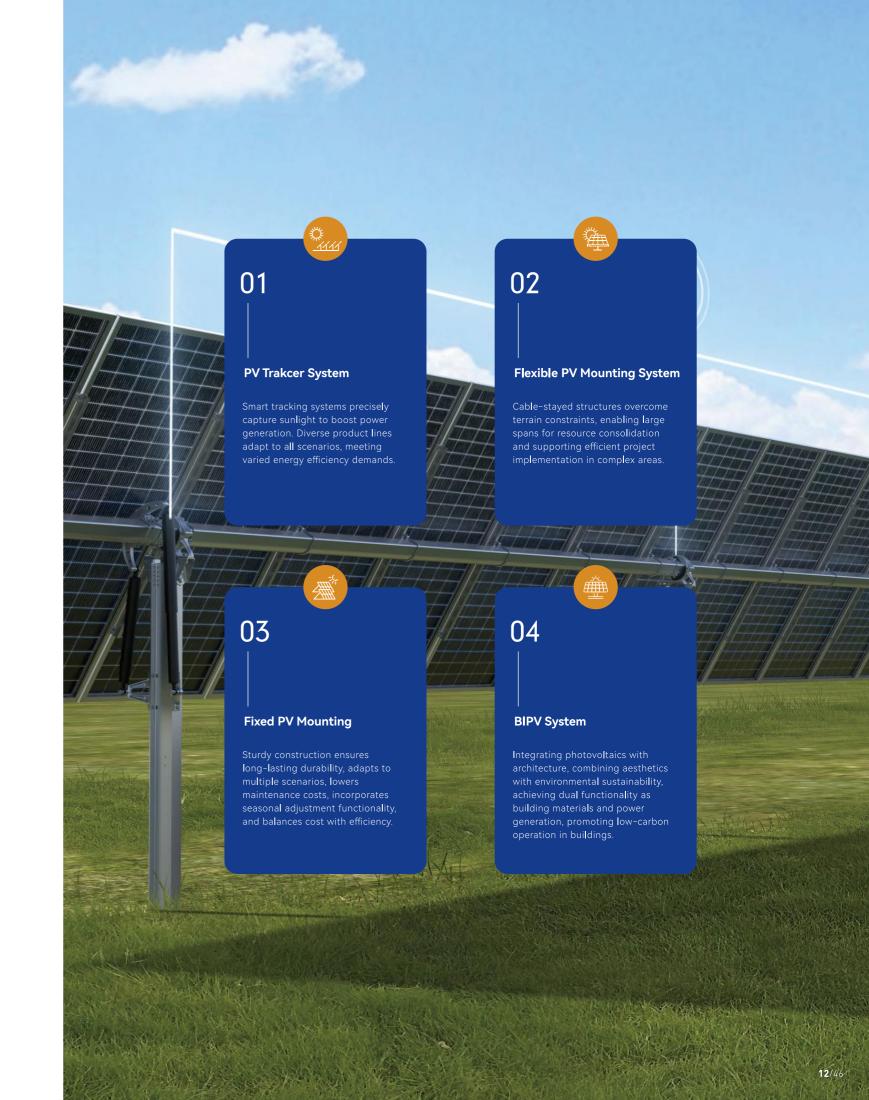




With technological R&D as its core driver, ESET SOLAR focuses on innovating and developing PV mounting systems, flexible PV mounting systems, fixed PV mounting, BIPV systems.

Its products are widely applicable to diverse scenarios, including ground-mounted power stations, industrial and commercial distributed power stations, agri-PV complementary projects, and fishery-PV complementary projects, demonstrating strong environmental adaptability and structural reliability.

The company has obtained ISO 9001 Quality Management System certification, along with multiple international authoritative certifications such as TUV, CE, and UL, placing its product quality and technical standards among the industry's leading levels.





# **ESEEK-Steady 1P Solar Tracker**

Windproof and Snowproof, Steady as a torque tube distributed self-locking makes it your anchor of stability in extreme weather. This system is designed to provide unwavering performance throughout its entire lifecycle, ensuring maximum photovoltaic energy output.

Featuring an innovative structural design integrated with ESET's proprietary torque tube distributed self-lockingtechnology, it delivers stable operation, efficient installation, and adaptability to diverse terrains, ensuring long-term, high-efficiency performance for your solar power plant.



• Diamond-shaped torque tube distributed self-locking stability, axially symmetric damping to reduce oscillation, and a wide-angle wind-facing design to mitigate vortex-induced vibrations, this system is built to withstand harsh conditions such as heavy snow, floods, and hail.



• An integrated bearing base forms a solid and efficient foundation, while the unidirectional carriage bolt fastening simplifies the assembly process. The torque tube's reduced diameter technology and quick-install purlin system enable swift and precise structural deployment.



• Driven by core smart algorithms and controlled via a user-friendly mobile app, the system guarantees stable, uninterrupted operation in all weather conditions.



# **ESEEK-Twins 1P Solar Tracker**

Smart Twin-Link, Steep-Slope Adaptable-Dual-Row Synergy, Unaffected by Terrain Variance. The system is a 1P dual-row linked photovoltaic tracking solution developed with the **optimal safety and cost** philosophy.

Featuring all-directional adjustment and hassle-free installation, it is designed to adapt seamlessly to complex terrains and harsh weather conditions. With patented technologies such as mulit-drive and torque tube distributed self-locking, it ensures high stability, efficiency, and versatile terrain adaptability, guaranteeing long-term safe and efficient operation for your solar power plant.



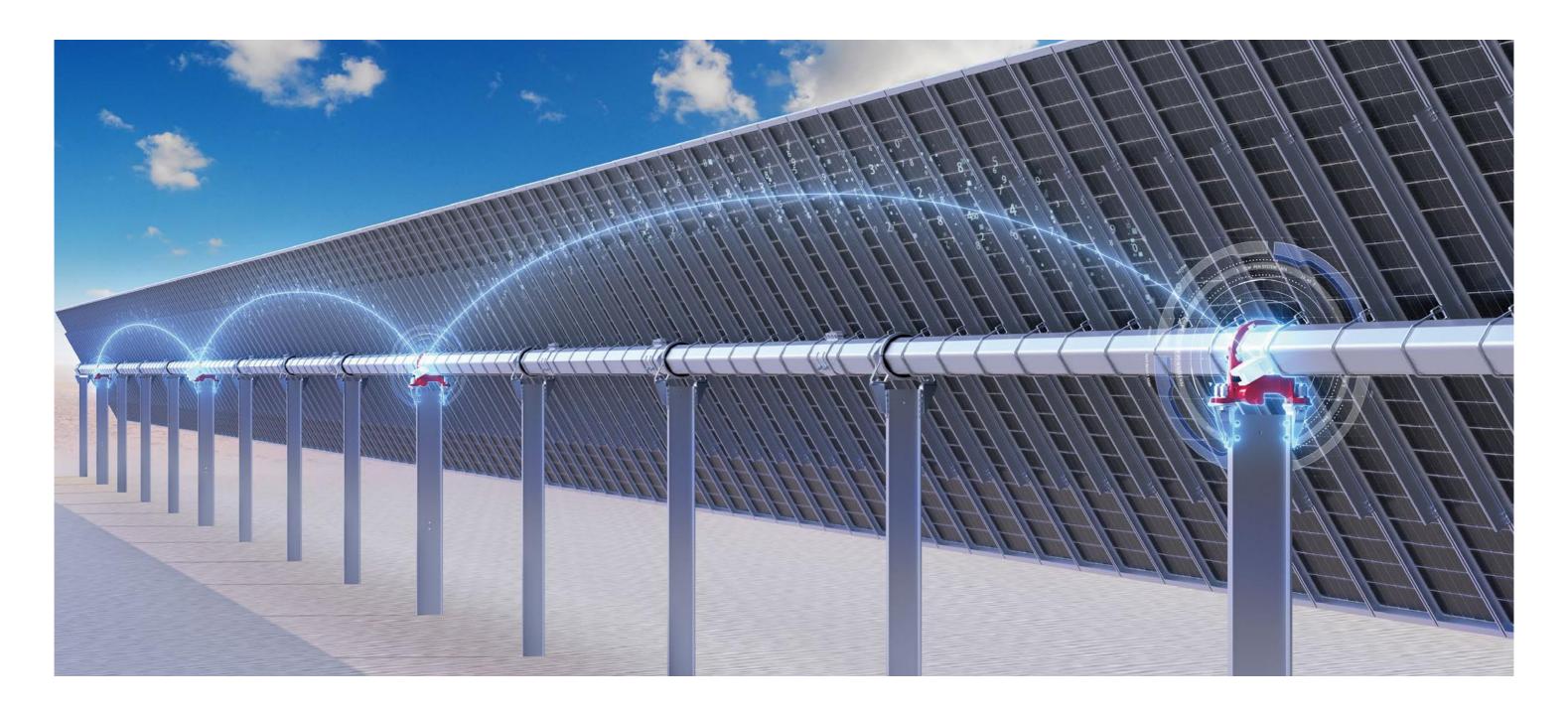
 The dual-row universal linkage design eliminates the need for precise STA alignment, easily accommodating ±15° terrain deviations and irregular geometric layouts. The reduced-diameter connections and quick-install purlins greatly enhance installation efficiency and reduce labor costs.



Featuring torque tube distributed self-locking stability, axially symmetric damping to reduce oscillation, and a
wide-angle wind-facing design to mitigate vortex-induced vibrations, this system is built to withstand harsh
conditions such as heavy snow, floods, and hail.



• Driven by core smart algorithms and controlled via a user-friendly mobile app, the system guarantees stable, uninterrupted operation in all weather conditions.



# **ESEEK-Strider 1P Solar Tracker**

Long-Span Design with Fewer Pile Foundations-Single-Row Innovation for Cost Efficiency in Large-Scale Power Plants. Designed for large-scale ground-mounted power plants, this system is based on the concept of super-high wind pressure, ultra-long row layouts, and ultra-wide spans.

It is a highly adaptable single-row 1P independent tracking system with multi-drive and high-strength locking features. Its extendable design and robust safety ensure exceptional performance, while the ultra-long span structure significantly reduces pile foundations and construction costs, helping power plants achieve long-term cost savings and improved efficiency throughout their lifecycle.



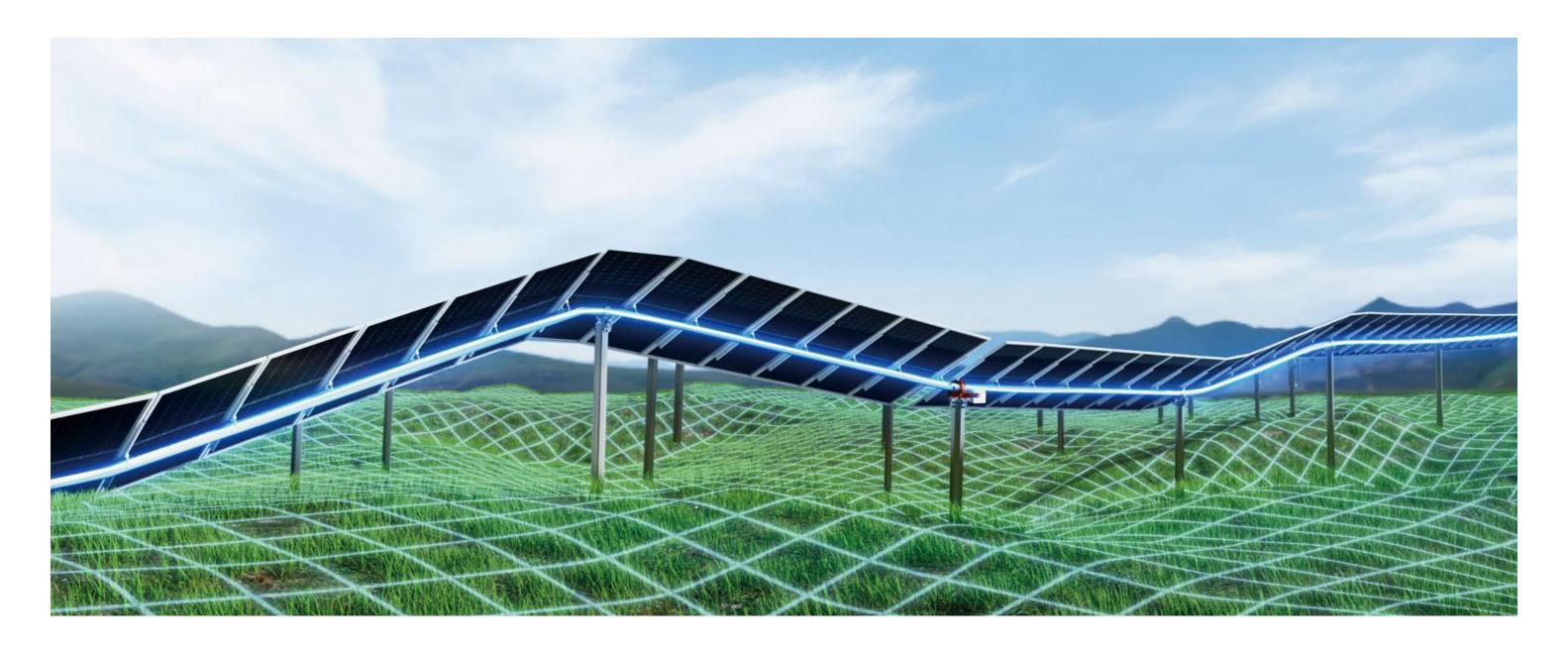
• By reducing the number of single-row support posts by 25%, the system helps lower BOS (Balance of System) costs, especially in complex terrains.



The large-diameter octagonal torque tube increases strength by 35%. The carriage bolt connection ensures quick,
one-way installation with safety assurance. Multi-point electrical synchronization technology eliminates delays and
instability risks, while the multi-drive and high-strength locking functions enhance wind resistance, raising the critical
wind speed and ensuring the stability and safety of the power plant in extreme weather conditions. This also reduces
operation and maintenance risks.



• With the integration of NCU, TCU, and SCADA for seamless smart control, the system ensures rapid response and efficient operation and maintenance.



# **ESEEK-Climber 1P Solar Tracker**

Seamless Terrain Adaptation-Empowering Steep Slopes with Solar Power. The system is a 1P single-axis tracking solution developed based on the concept of adapting to hillside and mountainous terrain.

Specially designed for complex hilly and mountainous landscapes, this system integrates innovative structural design and intelligent self-adaptive technology to significantly reduce construction costs and terrain limitations. It ensures safe and stable operation of the power plant, providing customers with higher returns on investment and lower O&M costs.

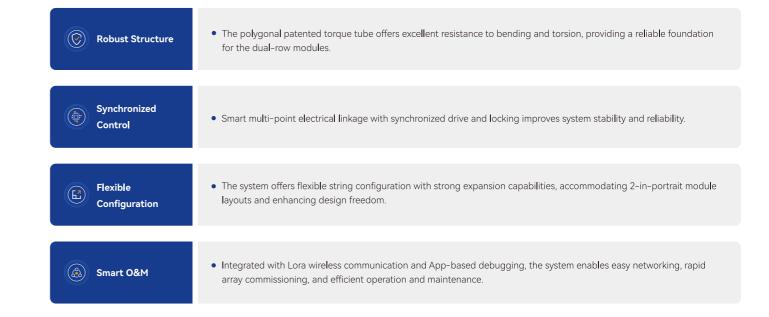
- Terrain Adaptability
- The torque tube's interlocking gap design adjusts naturally to the terrain, offering exceptional adaptability to a wide range of landscapes.
- Structural Safety
- The torque tube distributed self-locking function significantly enhances wind resistance, raising the critical wind speed to ensure the safety and stability of the power plant in extreme weather conditions.
- Flexible Installation
- By adopting shrink tube technology for torque tube connections, installation time is reduced by half. Modular design also
  reduces the number of components, improving installation efficiency and lowering labor costs. Additionally, the system
  minimizes land excavation and leveling expenses, significantly cutting costs for site preparation and foundation construction.
- Long-Term
  O&M Efficiency
- Design features such as control of the inflection point in the torque tube effectively reduce stress fatigue, extending service life and reducing maintenance frequency. Smart algorithms and cloud platform support enable remote monitoring, fault diagnosis, and extreme weather protection strategies, enhancing operation and maintenance efficiency.



# **EXCEED 2P Solar Tracker**

Multi drive Matrix: Perfect Sync, Unmatched Terrain Performance. The system is a 2P multi-point synchronized electrical linkage horizontal single-axis tracking solution developed with the philosophy of **double the capacity**, revolutionize efficiency.

By integrating innovative multi-point linkage structure and synchronized drive technology, the system significantly increases the capacity of a single unit while effectively reducing the number of foundations and the amount of steel used, delivering system-level cost reduction and efficiency enhancement. Additionally, the breakthrough in multi-point drive technology solves the aerodynamic stability challenges of large chord-length structures under high wind conditions, providing the power plant with enhanced safety and easier operation and maintenance. This translates into higher returns on investment and a more robust operational experience for customers.



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# **Fixed Mounting System**

Drawing on ESET's deep expertise in power structure design and 20 years of galvanizing experience, our fixed mounting system integrates the stability and durability of large-scale tubular towers into the photovoltaic mounting sector.

With proprietary high-corrosion-resistant materials, an intelligent manufacturing base, and a cross-disciplinary technical team, we've redefined the concept of fixed mounts – not just as supports, but as a benchmark solution for reliable, rapid delivery and scientifically engineered wind resistance throughout the system's entire lifecycle.



• Drawing from the design principles of power transmission tower structures and combining wind engineering and geotechnical analysis, our system ensures 25 years of stable operation.



• With our proprietary ZAM (zinc-aluminum-magnesium) coating production line, coupled with years of expertise in galvanizing processes, the material's corrosion resistance is significantly enhanced, making it impervious to even the harshest environments.



 Boasting a total production capacity of 30GW, a scale of 650,000 tons of hot-dip galvanizing, and 40 intelligent production lines, we are equipped to rapidly respond to large-scale, customized demands.



• Our interdisciplinary team, covering fields like mechanical automation and artificial intelligence, provides full-cycle technical support - from design to operation and maintenance - empowering the entire value chain.



# **Fixed Adjustable Mounting System**

This fixed adjustable mounting system adopts a push-rod stepless adjustment mechanism combined with a triangular locking structure. While retaining the high stability and low maintenance advantages of fixed mounts, it enables seasonal manual or motorized adjustment (recommended 2–4 times per year) to effectively enhance power generation efficiency.

The system supports angle adjustments from 15° to 50°, offers excellent wind resistance and slope adaptability, making it an ideal cost-effective solution for large-scale ground-mounted PV plants.



 $\bullet \ \ \text{Push-Rod Operation} \cdot \text{Quick Locking. Ground push-rod operation allows fast adjustment and reliable locking.}$ 



• Triangular Locking · Superior Wind Resistance. Triangular stable structure provides wind resistance comparable to fixed mounts.



• Pin Fastening · No Loosening Risk. Mechanical pin locking ensures no loosening.



 $\bullet\,$  Durable  $\cdot$  Low Maintenance. Simple and durable design reduces O&M costs.

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# **PV Flexible Mounting System-Honsine-2Cable**

The system utilizes an innovative dual-cable self-balancing mechanism, combining pre-stressed cables and the main steel frame into a synergistic load-bearing structure. This technology effectively overcomes construction and application challenges in complex terrains such as steep slopes, deserts, and ponds.

It significantly reduces the number of foundations, lowers land development requirements, and increases the installed capacity per unit area, boosting project investment returns. It has become the go-to, high-efficiency technical solution for complex mountainous photovoltaic installations, fishery-PV complementary projects, and other integrated applications.



• The damping system combined with dual-anchor fixation enhances wind and seismic resistance, ensuring long-term safe operation in harsh environments.



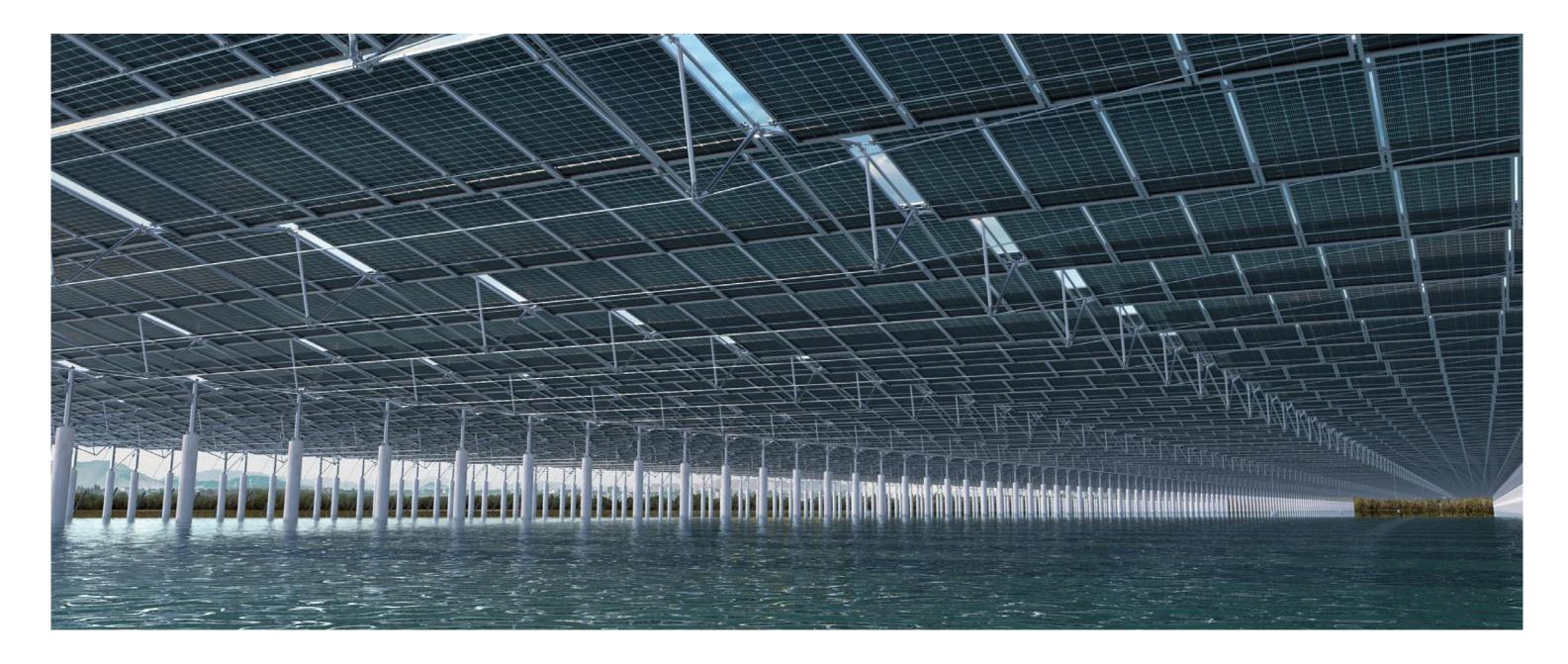
• Standardized modules and spatial reuse substantially lower construction costs and improve investment returns.



• With flexible self-adaptation and rotational anchoring, the system easily handles complex landscapes and simplifies engineering challenges.



 Breaking through scene limitations, the system is fully compatible with various application scenarios, including rugged mountains, arid deserts, aquaculture solar integration, and solar parking areas.



# **PV Flexible Mounting System-Honsine-3Cable**

The system features an innovative layout with dual upper cables and a curved lower cable, combined with triangular support rods and a multi-layer damping system, creating a high-rigidity self-balancing structure. This design significantly enhances adaptability to complex terrains, structural stability, and wind resistance, making it fully suitable for special scenarios such as mountains, waters, and deserts. It helps customers achieve higher space utilization, reduced foundation costs, and improved investment returns.



• The triangular support structure, combined with a dual damping system and wind-resistant ground anchors, works in synergy through a multi-level defense mechanism to greatly enhance wind and seismic resistance.



• Standardized high-density layout combined with large-span, high-clearance design significantly increases installed capacity and improves land utilization efficiency.



• The innovative cable structure, paired with a flexible anchoring system, easily adapts to various complex terrains, including mountains, waters, and deserts.



• The unique water damping and tuned mass damping systems effectively suppress vibrations, while the steel strand's wear-resistant design extends the system's service life.

# WHY US









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# • Extreme Weather Response Strategies

# Strong Wind/Typhoon

Active Defense + Structural Wind Resistance

Early Warning & Self-Locking: ESEEK Torque Tube Distributed Self-Locking, axisymmetric damping & radar wind system, level-14 wind resistance.

# (&) Low Temp/Heavy Snow

Structural Enhancement + Cold-Resistant Materials

Customized: Reinforced structure & adjusted angle reduce snow load damage.

Premium Materials: Zinc-aluminum-magnesium steel resists low temp, extreme temperature differences & snow erosion.



# Humidity/Saline-Alkali

Corrosion-Resistant Materials + Process Upgrade

Advanced Galvanizing: In-house hot-dip galvanizing process extends service life in harsh corrosive environments.





# Mountain

Terrain Adaptability and Installation Challenges

Terrain-Flexible: Flexible segmented splicing, adapting to steep slopes landforms.

Easy Deployment: Laser positioning, reducing construction difficulty.



Complex Scenario Solutions

# Desert Sand Erosion and Terrain Challenges

Sand-Resistant: Sealed drives + multi-point linkage tech for complex terrain.

Efficient Tracking: ESEEK series with self-locking & precise algorithm, max solar capture.



# Agri-PV Complementary Crop-Generation Balance & Efficiency

Stereo Synergy: Adjustable modules + High-height PV rack design, matching crop growth needs.

Eco-Compatible: Unifying power generation and farming.



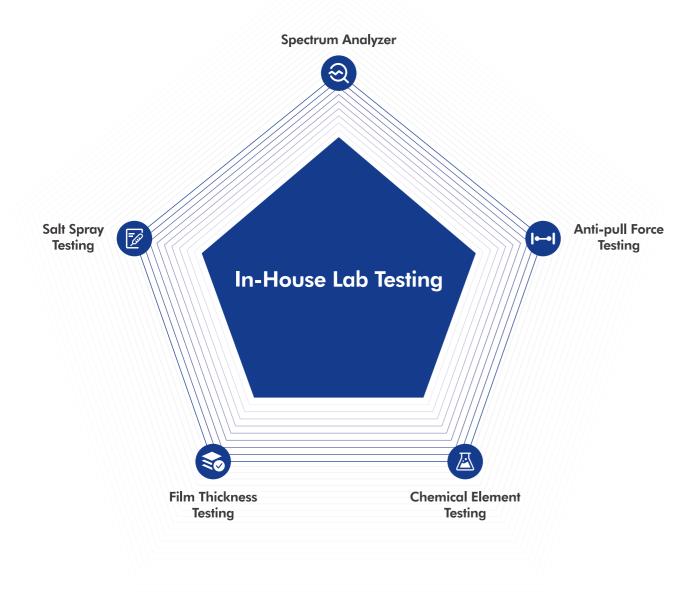
# Coastal **Corrosion Resistance and Durability**

Moisture-Proof: Sealed connections prevent seawater damage, stable operation.



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# QUALITY CONTROL



# **Third Party Certification**

Products are certified by third-party testing agencies in different worldwide regions to ensure that product performance meets architectural and design standards for global regions

### **Certified By Third-party Testing Agencies Regularly**













## **Sample Inspection**

Own factory with a quality-guarantee system for our hot-dip galvanized products and raw materials, our advanced testing equipment, excellent inspectors and thorough QC management, Whole process inspection from raw material to finished product including zinc coating adhesion testing, torque tube distortion measurement, bending radius R measurement and galvanized steel strip thickness inspection, etc.













# MORE THAN JUST A MANUFACTURER Proven reliability 99.9% on-time delivery rate Ironclad service Multidimensional Design Lean Manufacturing Delivery Strict Material **Pre-Assembly** Selection

# THE EFFICIENT AND RESILIENT SUPPLY CHAIN

### **Global Supply Chain**

Manufacturing Hubs

17 Smart Factories

GW+ Total Capacity

Saudi factories + China bases: cover Middle East, Europe, Americas

VERTICAL QUALITY CONTROL

FAST

RELIABLE

TOP-QUALITY PRODUCTS

# **Global Delivery Power**

Sold to Southeast Asia, Middle East, Africa (all locally certified)

Excellent industrial coordination capability

# **Global Development Capability**

Marketing centers: China, Saudi Arabia, Spain, Brazil

Certified by TUV, CE, UL, SBP & other global authorities

Products work anywhere: plateaus, typhoon zones, etc

Custom tech + local service

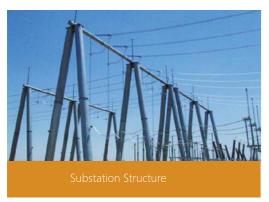
Regular at international exhibitions: expanding high-end markets

# POWER TRANSMSSION AND SUBSTATION

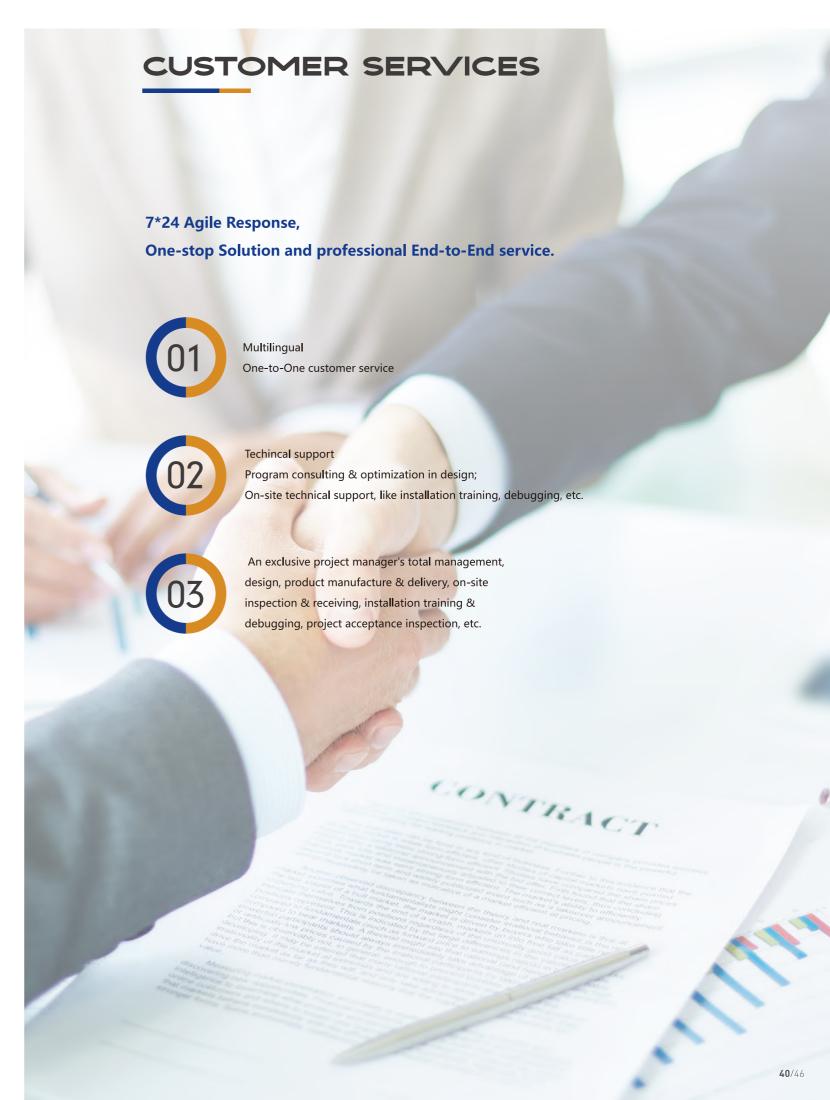
One-stop solutions for solar projects: trackers + steel towers.15+ years experiences in steel structure designing and application.



















# CORE VALUES

EARNEST OPENNESS

COURAGE

**RESPONSIBILITY** 



# **RESPONSIBILITY**

ESET is committed to becoming the most trustworthy partner in the global photovoltaic industry.

ESET offers global customers with intelligent, efficient and reliable solutions of photovoltaic mounting system by adhering to the development route of technology R&D and innovation and promoting the technological upgrades and product improvement.

ESET always upholds the core values of earnest, openness, courage and responsibility, stabilizes each step in every task, achieves stable operation and sustainable development, and contributes to the energy transition towards a zero-carbon future.

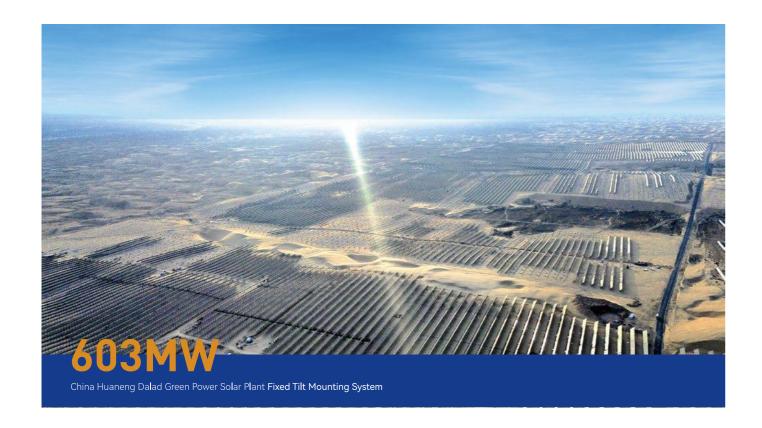








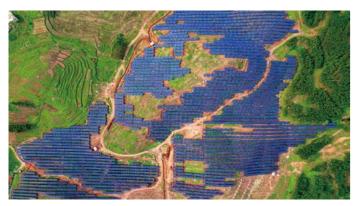
# **GLOBAL CASES**





# **500MW**

Kubuqi Desert New Energy Solar Plant Fixed Tilt Mounting System



# 300MW

Longyuan New Energy Solar Plant in Zhaoyuan City Flexible Adjustable Mounting System



Gapan, Philippines Solar Project Fixed PV Mounting



# 400MW

China HUADIAN Energy Storage Project Solar Plant Single-axis Tracker 1P



# **114MW**

China Huaneng Lancang River Nagu Solar Plant (Phase I) Fixed Tilt Mounting System

# **GLOBAL CASES**





150 MW Laos Solar Plant Single-Axis Tracker 1P



**100MW** Tianzhen Solar Power Generation + 10% Energy Storage Project Flexible Mounting System



12.8MW Matara, Sri Lanka Single-Axis Tracker 1P



21MW Sri Lanka Solar Plant Single-Axis Tracker 1P