Enabling Efficient Operation and Maintenance

By remote monitoring with early detection of equipment issues, Hikvision's solution streamlines and digitizes the inspection process, minimizing operational downtime and maximizing efficiency.

Standardized Inspection Process

Hikvision simplifies the entire inspection process, from planning and execution to reporting, by bringing it online. Every step is traceable through HikCentral software. Detailed inspection processes and results for each item are reported with statistics and charts, making it easy to identify and address issues, ultimately aiding in decision-making.

Planning → Conduct Inspection → Data Reporting → Defect Management

Diversified Product Mix Options

Hikvision offers a range of product mix options for remote and on-site inspections, empowering security managers to maintain situational awareness of solar assets.

· Remote inspection with thermal products

By continuously monitoring the solar panel temperatures in real time, Hikvision's cutting-edged thermal products provide valuable insights into the equipment's condition. This allows for timely maintenance and help extend the lifespan of solar panels.

· Remote inspection based on video imaging

By using a set of panoramic camera and PTZ cameras, this system enables security staff to access both panoramic and detailed view of critical assets.

Additionally, the AR Live map enables a quick overview of each camera's location to check whether the equipment works properly, enabling timely repairs if any issues arise.

· On-site inspection and equipment maintenance with portable devices

Inspectors can view tasks and checklists on a mobile app, swiftly capture visual evidence and upload it for real-time collaboration.

Body-Worn Cameras and Helmet Cameras help in effortless recording of the operational process, providing a comprehensive documentation of the maintenance activities.

Moreover, the two-way intercom facilitates communication between on-site workers and the management team, ensuring prompt and accurate guidance.

Visualizing Data for Better Insights

HikCentral platform and video wall system equips the operation and maintenance team with a bird's eye views and multidimensional analytics, displaying on-going site operations and security situations with detailed information, which aids incident handling and decision-making.

Visualized Data for Better Insights

Insights into safety compliance during field operation

Insights into asset inspection

Insights into alarms and incidents

Safeguarding sustainable energy in a better way

Hikvision
Solar Farm Solution

Solutions by Scenario

Securing Perimeter & Monitoring Vehicle Access

In solar farms where there is limited supervision, Hikvision's thermal and AI-based technologies help make perimeter protection and vehicle management much easier.
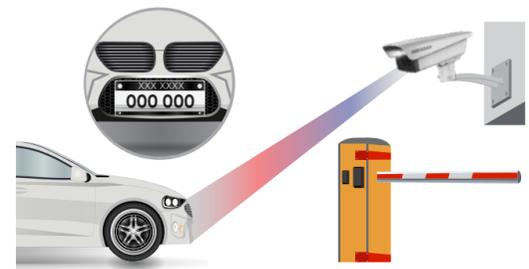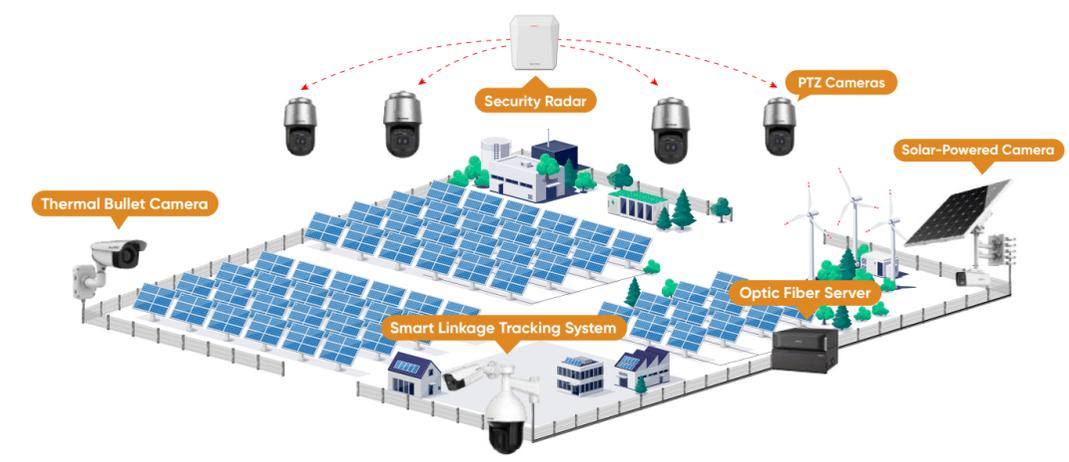
Perimeter Protection

Hikvision's top-notch products are designed to detect and protect against security threats, making them ideal for safeguarding solar farms.

Thermal cameras offer real-time monitoring day and night, even in harsh weather and low-light conditions. With an extensive detection range and high accuracy, these cameras trigger alarms instantly upon detecting intrusions.

By integrating radar technology, nearby **PTZ cameras** capture footage from multiple angles, ensuring valuable video evidence is preserved. Moreover, **solar-powered cameras** offer a cost-effective approach to perimeter security, eliminating the need for additional wires or cables.

For ultra-long distance security, **fiber optic products** deliver high-precision protection and leverage the HIK-DAS algorithm to filter out false positives.

Vehicle Management

Hikvision offers convenient and efficient entrance & exit control for both internal or external vehicles in solar farms.

Our **AI-based Cameras** identify vehicle information even in low-light conditions. Detailed attribute data ensures administrators can verify the vehicles entering the solar farm.

Improving Personnel Safety at All Times

Access Control Management

Hikvision's **MinMoe Face Recognition Terminals and Swing Barriers** provide efficient and fast access control through biometric recognitions. They help safeguard the well-being of personnel, ensure strict control and authorized access in critical areas.

And visitors can conveniently check-in and –out by pre-registering on HikCentral platform.

PPE Detection

Safeguard workers and ensure personal protective equipment (PPE) compliance with Hikvision's AI-based system.

The system actively monitors whether workers are wearing the necessary PPE, offering timely alerts and enabling immediate actions. PPE compliance is ensured through real-time detection, effectively preventing safety hazards.

Solar farms, typically located in remote mountainous areas or deserts, present challenges for overall security management. The inspection of equipment becomes infrequent due to limited personnel and remote locations, thereby posing potential security hazards.

To address these challenges, Hikvision's Solar Farm Solution leverages smart technologies to simplify operations, enhance security, and create a safer working environment for workers.

Here is the solution that works. ▶