



24h Service

Professional pre-sales and after-sales service team responds to customers' questions within 2 hours and provides solutions within 24 hours.



18-Month Warranty

If Heyuan's products have quality issues, free repair is provided within 18 months, and high-quality service is offered for life.



Free Upgrade

Heyuan provides free product software upgrades.



Comprehensive Training

Heyuan organizes and arranges relevant dispatch personnel to conduct comprehensive training on the system, ensuring that operators can independently operate and maintain the system.



400-616-3226

Hi-IoT Industry Platform



heyuan Intelligence Technology Co., Ltd.
www.heyuanintel.com 0531-68621670 0531-68621679



Company Brief

Heyuan Intelligent Technology Co., Ltd. is headquartered in the Aosheng Building, High-tech Zone, Jinan. The company has long been dedicated to the fields of rail transit, large-scale construction, parks, and industrial and mining enterprises, committed to research and innovation in new-generation information technologies for digitalization and intelligence. Based on the principles of production safety and the "dual carbon" goals (carbon peak and carbon neutrality), the company provides integrated soft-hard-intelligence solutions and services for various scenarios.

He Yuan Intelligent is a national high-tech enterprise, certified with the ISO9001 quality management system, the Information Technology Service Management System, the Measurement Management System, and holds a Class I qualification for electronic and intelligent engineering projects. It is a backbone enterprise of the National Information and Communication International Innovation Park, a provincial outstanding software enterprise, a "One Enterprise, One Technology" innovation enterprise of Shandong Province, a Shandong Provincial Engineering Technology Research Center, and owns nearly a hundred patents and copyrights.

He Yuan Intelligent actively responds to national policies, with the corporate mission of "making all scenarios digital and value-izing all data." Based on deep research in the electrical field, the company further conducts technological research in IoT, AI, big data, and cloud architecture, continuously building integrated soft-hard-intelligence systems ("cloud-edge-end") (from cloud platforms and intelligent gateways to new types of perception), forming professional systems for multiple application scenarios to safeguard the intelligent and digital enhancement of users and the safe operation of equipment.

The company adopts a sales model primarily based on direct sales, with distribution as a supplement. Around the business philosophy of "crossing industries but not professions," it has formed a market pattern with Shandong as the center, deeply specializing in different fields across the country. Simultaneously, relying on "Internet+", it conducts e-commerce comprehensively, achieving an integrated online-offline approach and customer-centric product promotion and technical services.

We possess an experienced R&D team, a continuously improved sales service network, and a harmoniously operating He Yuan ecological platform, and look forward to sincere cooperation with you!

Honors & Certificates



System Background

The construction of Digital China, the achievement of dual-carbon goals, and the guarantee of safe production all rely on the development and application of new-generation information technologies such as the Internet of Things, big data, and artificial intelligence. Therefore, relying on its years of accumulated technology, Heyuan Intelligent has long been deeply involved in various industries of the national economy. With a profound understanding of business scenarios, starting from the needs of enterprise digital transformation, it is committed to the research and product innovation of new-generation information technologies for digitalization and intelligence. It provides integrated software, hardware, and intelligent solutions and services for various scenarios as its development strategy, and takes digitizing all scenarios and valuing all data as its corporate mission.



> Needs

Subsystems are distributed and independent

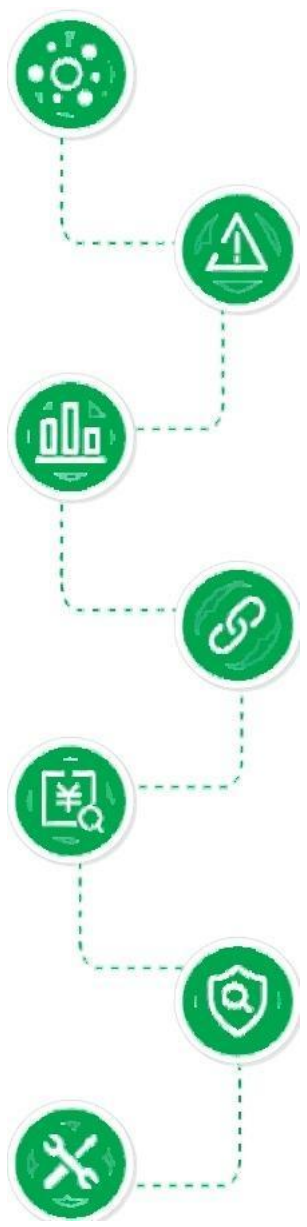
Various complex operating systems operate independently and separately, with extremely complex data, making it impossible to achieve integration and interoperability, resulting in high maintenance difficulty.

Data report analysis is difficult, and there is no support for energy conservation and emission reduction.

Manually recorded energy data and paper-based data reports lack intuitive data visualization, making energy flow unclear and leaving no means of energy conservation and consumption reduction.

High maintenance costs and low work efficiency

With equipment from multiple manufacturers operating simultaneously, daily inspection and maintenance require a significant investment of manpower and resources, increasing maintenance and management costs and resulting in low operational efficiency.



Unforeseen hazards and weak risk prevention

Without big data analytics, potential security risks cannot be identified or resolved in a timely manner.

The equipment is controlled in a single way and cannot achieve coordinated operation.

The control equipment is relatively simple and cannot control multiple devices in a coordinated manner, let alone coordinate the control of multiple subsystems.

Inspections lack oversight, and maintenance management is not standardized.

Daily inspections rely solely on self-registration and lack modern technological oversight, making it difficult to prevent improper use of resources.

No prior warning, long repair time

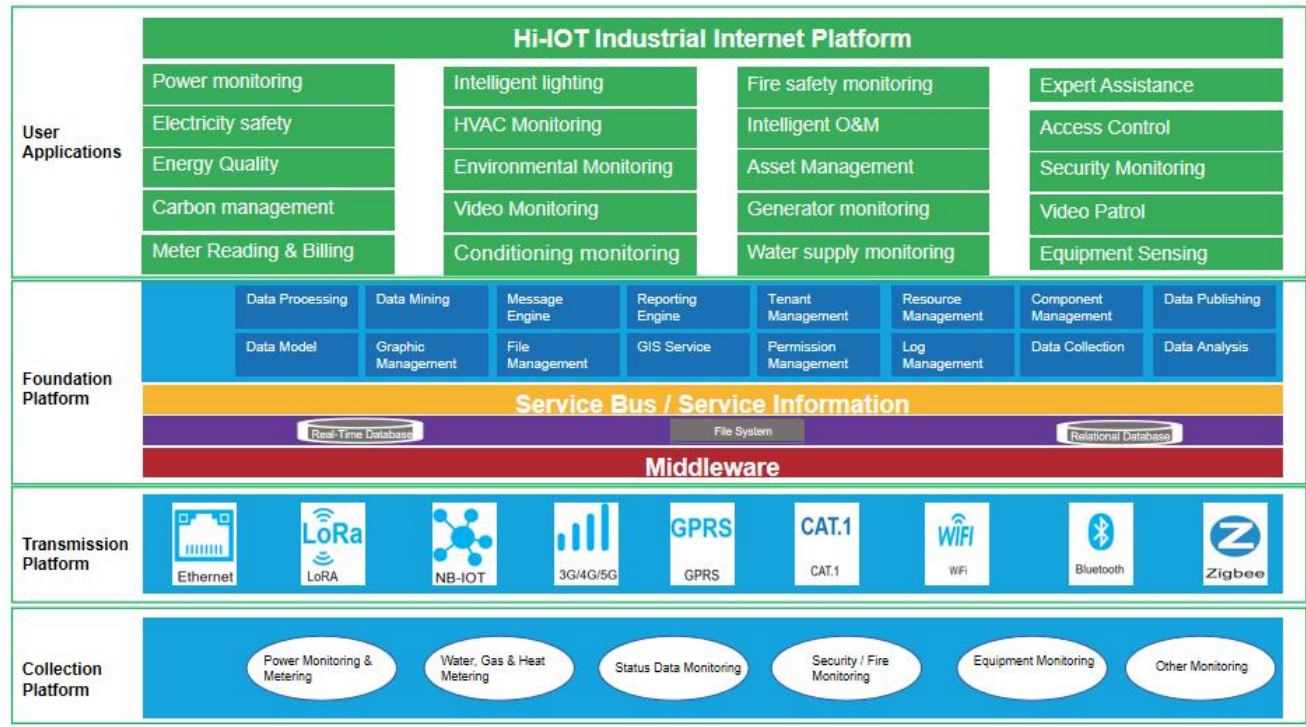
The equipment in operation is diverse and scattered, making it impossible to immediately identify and locate fault information. It requires on-site confirmation after user notification, with no prior warning and slow speed of problem finding and handling after the fact.

System Overview

The Hi-IoT Industrial Internet Platform is a comprehensive operation and maintenance management platform based on next-generation IoT, AI, cloud computing, and big data analytics technologies. It enables real-time monitoring, early warning, analysis, traceability, and management of user equipment and the environment. It provides intelligent management of user electrical, energy, carbon, safety, billing, environmental control, and operation and maintenance aspects, achieving truly 24/7 proactive operation and maintenance with zero blind spots and zero hidden dangers, providing customers with better operation and maintenance services. Combined with big data analytics, it also enables full-chain, full-lifecycle asset management, assisting in optimizing energy consumption structure, saving energy and reducing carbon emissions, and lowering costs.



> System Architecture



> Application value

Intelligent monitoring ensures operational safety

It enables real-time monitoring and early warning of user data related to electrical systems, energy, billing, environment, security, fire protection, and smart facilities, greatly improving the intelligence and digitalization of user management.

Intelligent management saves operating costs

Data visualization and transparency effectively reduce the labor and time costs of meter reading, inspection, and troubleshooting, and reduce equipment maintenance costs.

Intelligent analysis improves management level

It enables centralized collection and monitoring of various types of data, facilitates data mining and analysis, makes fault location and problem analysis more convenient, and improves the speed of event response.

Intelligent operation and maintenance, accumulating operational data

It can accumulate a large amount of data and information related to operation and maintenance, such as electrical, equipment, safety, and environment, so as to completely transform "passive emergency repair" into "proactive operation and maintenance", providing knowledge experience for continuous operation optimization and improvement.

> Advantages

o Unified and integrated high-capacity management platform

It supports integration with third-party intelligent systems, provides access to device measurement points, and supports simultaneous access by multiple clients, meeting users' business management needs for large capacity and multiple scenarios.

o N modular business expansions

The modular design allows for the addition of new features online and real-time updates. Users can freely and flexibly select or expand modules and function menus according to their needs.

o New operation and maintenance model for more efficient service

Equipment and environmental data are monitored 24/7, reflecting operational status anytime, anywhere, and providing timely alarms for abnormal operations. This enables minimal or no staffing, scientifically guides inspections, saves labor costs, and ensures personnel safety.

o Autonomous early warning, tiered push notification

The system proactively pushes notifications for operational anomalies, intelligently analyzes and processes equipment warnings, alarms, and fault information according to different levels and types.

o Intelligent linkage control

By integrating various subsystems and using intelligent algorithms, the system controls the linkage between devices in each subsystem. The linkage relationships can be freely configured, enabling unified management of alarm information from each subsystem and achieving intelligent unattended operation.

o Rich and fast protocol access capabilities

It supports access to nearly 200 industrial bus protocols and has extensive capabilities for custom development of industrial bus protocols, enabling rapid integration of devices and platforms, reducing project implementation costs and delivery cycles.

o Easy to use, easy to maintain, easy to manage

The system offers import and presentation methods for electronic maps, SVG, 3D, and various other maps, providing PC web and mobile terminal operation and maintenance tools for monitoring and management anytime, anywhere. It supports network communication topology display, providing real-time online feedback on the communication status of on-site devices and gateways, facilitating the management and maintenance of system equipment. SVG maps, in particular, support online

o Application of advanced technologies

It integrates new technologies such as the Internet of Things, big data, cloud computing, artificial intelligence, and video structured analysis. It provides 3D modeling and digital display, offers multiple data analysis modes, and mines the value behind data from multiple dimensions such as type, time, trend, and level, providing professional operation and maintenance support for clients.

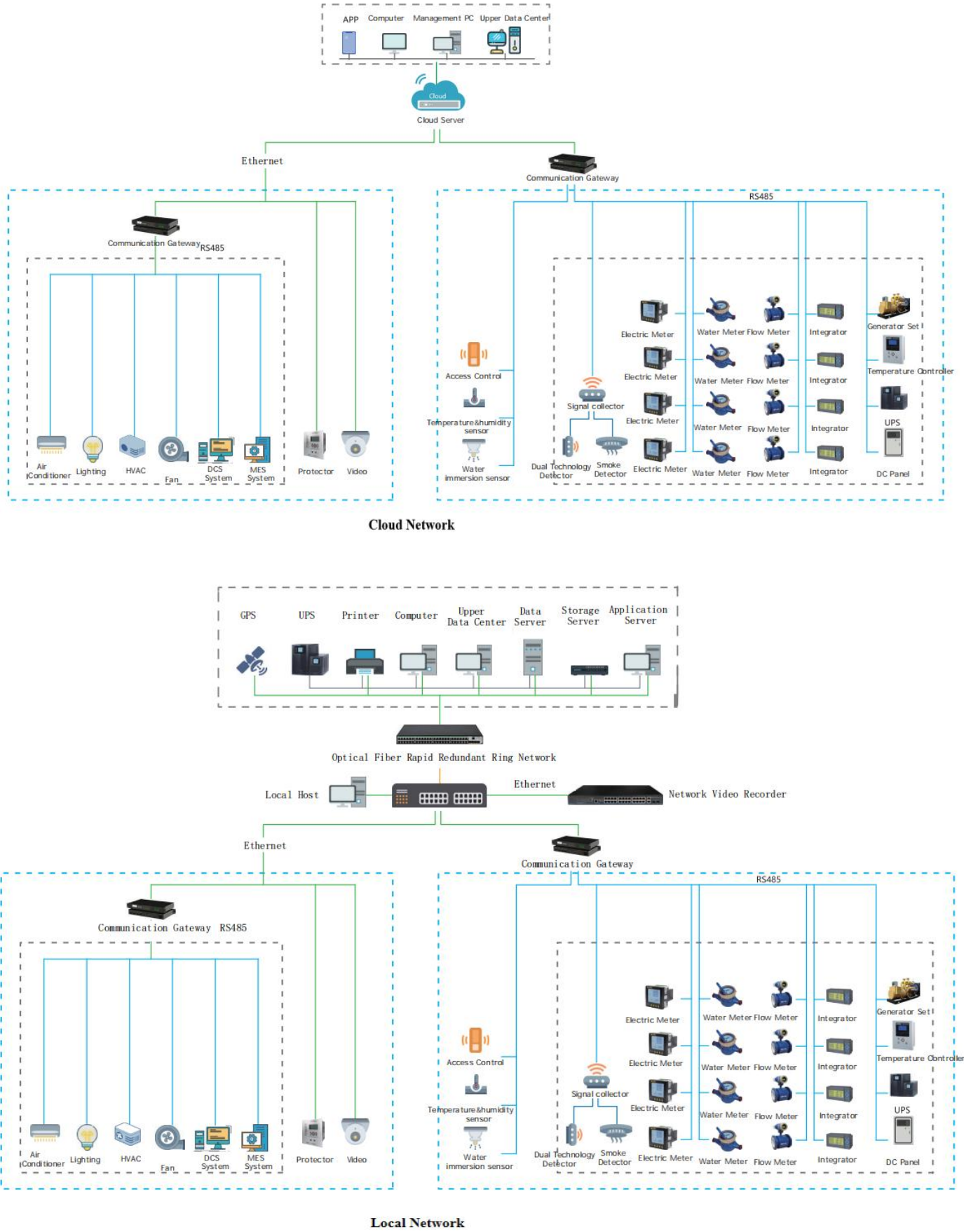
o Eliminate information silos

By breaking down data silos between systems and integrating comprehensive data from monitoring equipment, smart facilities, and environmental information, we can achieve functional information sharing and interaction, intelligent analysis and linkage control of equipment, and build an integrated centralized monitoring capability.

o Multiple early warning methods

The system can be monitored anytime, anywhere via the app. Various early warnings and alarms can be proactively pushed through the platform, SMS, and the app, enabling precise location, investigation, and handling. This seamless integration of online and offline services delivers more efficient service.

Platform networking



Power Operation and Maintenance Management System

Overview

The power operation and maintenance management system is based on modern information technologies such as the Internet of Things, mobile internet, cloud computing, and big data. It adopts an integrated functional design encompassing power monitoring, electrical safety, power quality, energy management, video surveillance, auxiliary monitoring, and asset management. This enables comprehensive supervision of substations and distribution centers, featuring functions such as telemetry, remote signaling, remote control, SOE event recording, fault recording, and remote parameter setting. It collects and monitors power operation status in real time, performs full data analysis and judgment, and handles contingency plans. It integrates operation and maintenance management, asset management, environmental monitoring, access control, smoke detection monitoring, and video surveillance. Users can monitor the overall operation status of substations and obtain various early warnings and alarms in real time via web or mobile app, meeting the needs of unmanned or minimally staffed power operations. This provides users with effective professional technical support and operation and maintenance support, improving the safety level of the power system.



Function



Operations and Maintenance Overview

The system displays project distribution and station operation statistics on a large visual screen, allowing users to grasp power monitoring data, electricity consumption trends, environmental information, alarm and work order operation and maintenance management statistics and analysis, and the latest real-time alarms in the area or station under their jurisdiction, enabling them to intuitively monitor operation and maintenance projects from a macro perspective.

Site distribution

The system provides a comprehensive map-based display of all station information, supporting the geographical distribution and querying of stations. Different station types are displayed in different ways. Users can track the number of stations under their jurisdiction, the number of transformers, their capacity, current load, current power consumption, the number of gateways and equipment, as well as real-time alarm information and work order processing status.



Site Overview

It allows users to query any station within its jurisdiction, access station information, alarm and work order operation and maintenance management statistics and analysis, voltage and power operation trends of each incoming power supply, energy consumption trends and analysis, environmental operation overview, latest alarm events, and primary diagram display.

Power monitoring

It supports querying data such as phase voltage, line voltage, current, leakage current, temperature, frequency, power, power factor, energy, switch open/closed positions, etc., for each project and circuit. It also supports historical trend queries for data from each measurement point group. Furthermore, it can intuitively display the primary power diagram, showing real-time operating information of transformer parameters such as voltage, current, active power, power factor, and winding temperature, as well as calculating load rate and generating parameter curves to facilitate the identification of abnormal points during transformer operation, ensuring safe and reliable power supply.



Power quality

Real-time power quality monitoring mainly monitors three-phase imbalance, harmonic analysis, voltage compliance rate, frequency deviation, etc. Through real-time monitoring, power quality reports are generated regularly, providing a direct data basis for improving power quality and increasing power efficiency.

Energy Management

The system monitors and analyzes the operating, shutdown, standby, and overload status of various energy-consuming devices, comparing them with historical data, standard limits, and enterprise management indicators. When deviations exceed limits, line faults occur, or abnormal situations arise, the system can promptly alert users through its alarm function, resolving issues in a timely manner, reducing the frequency of faults, and improving the efficiency of energy-consuming devices.

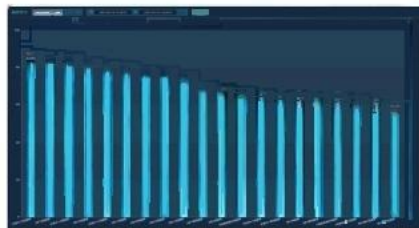


Auxiliary monitoring

It enables 24/7 status monitoring and intelligent control of the main electrical equipment, key equipment installation locations, and surrounding environment of the entire station, and integrates monitoring information such as environment, video, security, fire protection, and equipment to achieve functions such as information sharing and alarm linkage.

Hidden danger warning

Real-time monitoring of electrical parameters and equipment operating status, along with early warning and analysis of potential hazards, allows for proactive intervention and reduces accident handling costs. Once a hazard is identified, an early warning message can be immediately sent to safety management personnel, guiding them to address the hazard and eliminate potential fire safety risks, achieving the goal of "prevention before the event."



Intelligent Analysis

Based on big data ranking analysis, the system displays the data values of potential hazards and their occurrence times, allowing maintenance personnel to intuitively identify hazard points, target safety risks, and plug security loopholes. It can also perform AI-structured analysis on videos, issuing warnings to the platform and promptly notifying administrators when violations such as fires, smoke, smoking, or leaving one's post occur.

Linkage control

It supports conditional linkage control of equipment and video control based on alarm events, control events, and real-time data. It also supports linkage event recording and tracing functions, assisting in achieving unattended automated intelligent control. Through intelligent linkage, it improves the efficiency of emergency response and ensures the safety of the station environment and equipment.

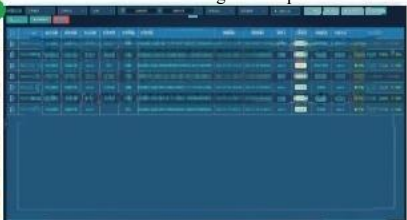


Asset Management

It provides lifecycle management for both field equipment and system equipment, and offers ledger management for user assets such as transformers and circuit breakers. It supports customizable equipment templates, ledger creation, entry, and querying, and supports storage in various media including text, documents, images, and QR codes. It also supports modification and export of ledger information. Maintenance and repair deadlines can be set for field equipment, and timely reminders can be sent to equipment nearing or exceeding their expiration dates.

Operation and maintenance

It enables the release, tracking, and management of various tasks such as alarm dissemination, inspection, defect elimination, and emergency repair. Detailed records of the processing of each work order can be kept via web and mobile app, supporting forwarding, processing, submission, and approval, and generating workflows. It supports quick operations such as one-click dispatching, batch forwarding, and batch approval, effectively handling work orders based on event circumstances. Through a closed-loop work order management process, various potential hazards on-site can be identified and resolved promptly.



Electrical Safety Monitoring System

System Introduction

The electrical safety monitoring system can realize the electrical parameter monitoring, and the potential fire hazard can be warned and analyzed. Once the potential fire hazard exists, the warning information can be sent to the safety management personnel immediately, and the potential fire hazard can be eliminated to achieve the purpose of "preventing the potential fire hazard".



Function Introduction



Cockpit

Get instant access to real-time project status, alarm trends, alarm ratios, incident statistics, installation rates, and latest alerts. This enables users to monitor and manage projects efficiently, stay informed about project conditions, and ensure smooth operations.

Safety Monitoring



Display project details, circuit details, latest data, trend curves, hazard management, ticket management, and historical data from a safety perspective. This helps users promptly identify equipment failures and hazards, develop effective solutions, and improve production safety and equipment efficiency.



Fault Record

Log potential hazard alerts for each circuit (including overvoltage, undervoltage, overcurrent, leakage, and overheating), then classify them by severity and create linked work orders. This helps users promptly identify equipment issues, effectively reducing failure rates while enhancing reliability and operational efficiency.

Comparative Analysis



Supports comparing loop test points with potential hazards to identify correlations and confirm the true cause of alarm events, helping users promptly and accurately locate hazards, quickly pinpoint the root cause of issues, and resolve problems in a timely and accurate manner.



Temperature Ranking

Ranking analysis of temperature measurement points across different zones/stations identifies high-ranking heat-generating areas as priority for hazard investigation, enabling focused and rapid identification of critical risk zones for timely hazard mitigation.

Fault Analysis



Analyze alarm counts, rankings, and type distribution across different zones/circuits to alert maintenance teams to prioritize high-risk areas. This enables users to swiftly assess circuit conditions and implement preventive measures proactively

Fire Safety System

System Introduction

The system integrates data from traditional fire control units, smart smoke detectors, fire water tanks, fire hydrants, and combustible gas monitors, with 24/7 real-time online monitoring of fire equipment status. It instantly alerts safety personnel to prevent emergencies, ensuring the safety of both people and public property.



Function Introduction



Fire Overview

The system provides 24/7 online monitoring of fire protection facilities' operational status, performing statistical analysis on fire data to generate visualized trend curves, bar charts, and pie charts. This ensures uninterrupted monitoring, reduces manpower and material resources, enhances work efficiency, and enables fire safety managers to grasp the overall fire safety situation, achieving visualized management.

Electrical Fire Early-Warning

The system can monitor the residual current and conductor temperature in real time. When the monitoring line is abnormal, it can quickly send out alarm information and accurately display the cause of the fault, which is convenient for the staff to find out



Intelligent Smoke Detection

Based on independent smoke detectors, the system collects data from these detectors, detects smoke in real time, and provides an alarm function. Smoke information can be viewed anytime and anywhere.



Firefighting water monitoring

The system monitors key parameters including fire water tank levels and hydrant pressure in real time. When these metrics exceed preset thresholds, it triggers instant alerts to the platform based on fire water usage patterns, enabling staff to promptly identify and resolve issues.



Combustible gas monitoring

The system detects gas leaks promptly and sends alerts to the platform, which then notifies users through multiple channels to reduce safety risks.



Energy Management System

System Introduction

The Energy Management System leverages next-generation IoT, cloud computing, and big data analytics to monitor energy consumption—including electricity, water, heat, steam, gas, and compressed air—in high-speed rail, construction, factories, industrial parks, property management, and enterprises. It enables data collection, storage, and detailed statistical analysis categorized by type, item, household, and professional sector. This system visualizes and digitizes energy usage, helping users achieve energy consumption alerts, reduce emissions, improve energy efficiency, lower operational costs, and enhance risk prediction capabilities.

By integrating big data analytics, it enables comprehensive management of assets throughout their entire lifecycle, supporting the optimization of energy consumption patterns, energy conservation, emission reduction, and cost efficiency.



Function Introduction



Energy Consumption Overview

Visualize and intuitively display real-time distribution of project sites, energy consumption statistics, and rankings. Supports viewing energy consumption trends, itemized and professional energy usage statistics, and peak-valley analysis. Key data is clear at a glance, with flexible customization.

Energy Benchmarking

The system supports customized energy consumption rankings by project, region, station, or user-defined criteria, providing clear insights into users' current energy usage. It also enables comprehensive energy structure analysis and benchmarking, thereby enhancing transparency in energy conservation and emission reduction efforts.

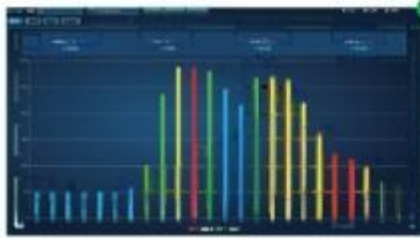


Energy Management

The system provides real-time monitoring of operational data for utilities including water, electricity, steam, compressed air, and nitrogen. It features comprehensive statistics on energy consumption by category, sub-item, department, and specialty, while mapping energy flows across all zones, departments, and circuits. Through multidimensional visualization, it enables users to swiftly identify energy consumption trends and equipment performance variations.

Energy Primary Diagrams

Display the routing of power distribution lines in each enterprise substation, along with current, power, and power factor data, as well as the flow paths, instantaneous flow rates, pipeline pressure, and temperature of other energy media such as steam, natural gas, and water. This system provides comprehensive visualization and monitoring of primary energy, enabling real-time tracking of energy consumption data for efficient and convenient management.

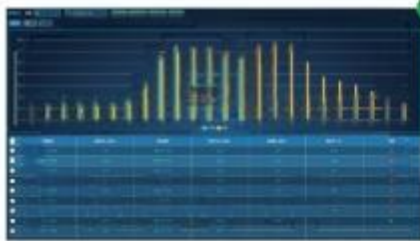


Electricity consumption Analysis

The system conducts multidimensional comparative analysis of energy resources such as water, electricity, gas, and heating, including energy efficiency analysis, energy conservation analysis, cost analysis, and comparative analysis. It provides guidance for enterprises to reduce operational costs, facilitates the identification of abnormal energy consumption points, and promotes energy conservation and consumption reduction.

Energy Report

The system supports generating and exporting various reports including centralized meter reading reports, sub-time reports for different regions and stations, itemized reports, specialized reports, and peak demand reports for operational project loops. This provides data support for management personnel to conduct energy consumption analysis and decision-making.



Energy Performance

The system supports product management, team management, and production/energy consumption data entry. It provides unit consumption and team performance analysis for each product, with comparative analysis capabilities for daily, monthly, and annual periods. Additionally, it offers daily, monthly, and annual statistical analysis to facilitate energy performance evaluation, thereby promoting cost reduction and efficiency improvement.

Energy Consumption Warning

Quickly respond to energy consumption data, receive alerts for abnormal energy usage, and proactively monitor equipment status to improve energy efficiency. Supports querying alarm details by parameters such as alert level, alert type, status, and time group for items, regions, and circuits.



Carbon Emission/Standard Coal Analysis

The system provides comprehensive analysis of carbon emissions across various energy sources, including total standard coal consumption and its composition. It supports comparative analysis of current versus previous periods (hourly, daily, monthly) and statistical analysis at hourly, daily, monthly, and annual levels. The platform delivers carbon emission reports with comparative insights, facilitates data-driven management of carbon emissions and standard coal consumption, and continuously optimizes energy structures while promoting energy efficiency.

Remote Meter Reading&Billing Management System

System Introduction

The meter reading and billing management system leverages next-generation IoT, cloud computing, and AI big data analytics to remotely collect data from electricity and water meters within its jurisdiction. It ensures real-time data reporting, centralized storage, and unified management, thereby reducing labor costs, significantly improving work efficiency, and enabling more scientific and efficient management.



Function Introduction



Meter Reading Overview

Supports meter statistics and analysis, allowing you to view energy and water consumption statistics and rankings, cost statistics and rankings, display statistical trends of energy and cost, and analyze the proportion of energy and water consumption and costs by region and unit.

Electricity & Water Bill Analysis

Supports monthly and annual statistical analysis of electricity/water bills, ranking and publicizing by region, unit, and time period, as well as analyzing the proportion of different types of fees across statistical cycles. Also supports querying and exporting data by region, unit, and time period.



Electricity & water management

Supports monthly and annual statistical analysis of electricity and water usage, with monthly/year rankings published by region, unit, and time period. Provides percentage analysis by energy type and statistical cycle dimensions to support energy-saving and cost-reduction initiatives. Enables queries and data export by hour, day, month, or year, categorized by region, unit, and time period.

Power Supply & Water Supply Management

The system provides detailed queries for electricity and water meter readings, enables balance reconciliation across units in different regions with detailed balance reports, supports manual or automatic reconciliation, monitors carry-over status, and allows printing of electricity and water bills by unit or meter number with customizable print settings. It also features power supply protection, free quota allocation, and fee control functionalities.



Loss Analysis

The system provides loss analysis for power/water supply nodes at all levels, offering monthly, regional, and time-based statistics on power supply and losses. It supports visualizations in bar charts, line graphs, and tables, significantly improving the efficiency and accuracy of anti-theft and leak detection management.

Payment Management

Supports bill management, payment history queries, and exports. It sends balance alerts and reminds you to recharge. Accepts cash, WeChat, Alipay, and OneCard payments for a convenient and fast experience.



Bill Management

Generate payment bills based on electricity and water usage details. View and export bills for easy information tracing, and notify customers promptly about overdue bills.

Report Management

Supports report queries and exports by dimensions such as region, organization, and energy type. Supports filtering and querying by organization and region based on ID or date.

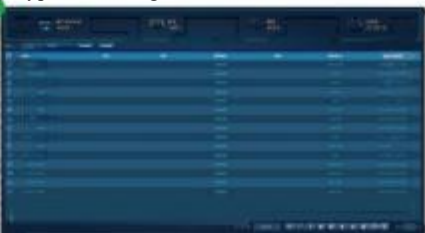


System Maintenance

The system supports maintenance operations including adding, deleting, modifying, and querying meters. Users can filter, query, and export meters by criteria such as region, unit, serial number, or meter number. It enables detailed record switching and supports unit management by project, unit number, unit name, and usage status. Additionally, it allows billing unit management by project, unit price number, meter type, and usage status.

Query and Pivot

Supports real-time data for all energy circuits, including daily historical data queries. Enables trend analysis by parameter, date, or time period, and allows retrieval of switch records, account balance records, and more.



Unmanned Assisted Monitoring System

Overview

Leveraging next-generation IoT artificial intelligence, cloud computing, big data analytics, and video structuring technologies, it provides round-the-clock status monitoring and intelligent control for the main electrical equipment, key equipment installation locations, and surrounding environment of the entire station. It integrates auxiliary systems such as environment, video, security, fire protection, equipment, and work orders to achieve information sharing, alarm linkage, and other functions.



Functions



Functions Video Subsystem

The video images of the substation are monitored in real-time, with remote control to set inspection routes for automatic monitoring. It supports video playback, split-screen playback, video projection, video replay, video control, preset position retrieval, cruise retrieval, video linkage, linkage recording, etc., and can perform alarm linkage with other subsystems.

Structured Analysis

It can perform AI structured analysis on videos. When violations such as fire, smoke, smoking, or leaving posts occur, the system sends warning events to the platform to promptly notify managers.

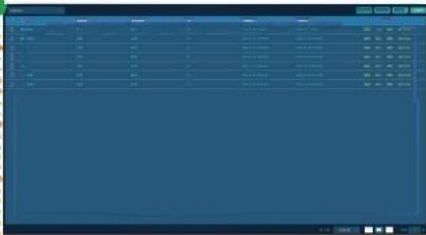


Equipment Subsystem

Supports the display and query of real-time data, historical data, and alarm events for auxiliary monitoring equipment such as air conditioners, UPS, SF6, dual-switch, partial discharge monitoring, power quality, arc protection, optical fiber temperature measurement, and temperature controllers.

Control Subsystem

Supports device control modes such as manual control, timing control, and scene control, supports device control functions linked with real-time data or alarm data, and supports control records and linkage record tracing.

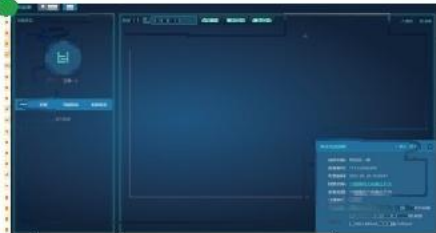


Environment Subsystem

Real-time environmental operation data can be collected through sensors such as temperature and humidity, SF6 gas, partial discharge, noise, meteorology, and illuminance. It supports query of real-time and historical data, and can send early warning pushes and linkage control equipment when environmental operation is abnormal.

Security Subsystem

Real-time environmental operation data can be collected through sensors such as temperature and humidity, SF6 gas, partial discharge, noise, meteorology, and illuminance. It supports query of real-time and historical data, and can send early warning pushes and linkage control equipment when environmental operation is abnormal.

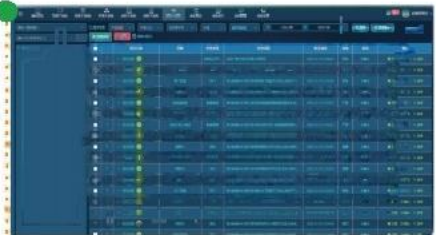


Fire Protection Subsystem

Supports access to sensors such as smoke detectors and temperature detectors, access to fire alarm hosts, access to fire hydrant pressure, etc. In case of an emergency, the system automatically pushes alarms, and also supports linkage equipment start-stop for fire alarms.

Alarm Subsystem

The alarm system can view functions such as real-time alarms, historical alarms, alarm statistics, and alarm status. When an alarm occurs, it notifies through Web, APP, phone calls, text messages, etc. Alarms are associated with work orders, enabling batch dispatching and greatly improving management efficiency.

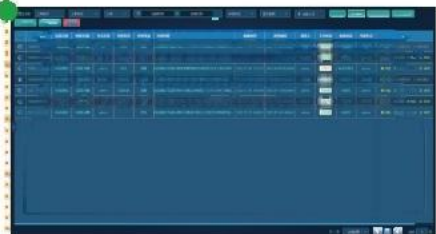


Linkage Subsystem

Based on real-time collected equipment/environment operation data, video surveillance, security management, fire monitoring, alarms and other information, corresponding actions of other equipment can be triggered to achieve real-time linkage control of video, access control, alarm and other equipment, and realize alarm linkage between subsystems.

Work Order Subsystem

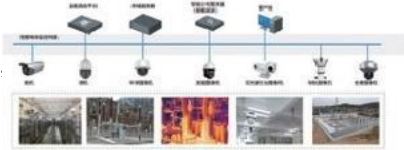
It can release, track, and manage various tasks such as inspections, defect elimination, alarm elimination, and emergency repairs. Detailed records, forwarding, processing, and review of each work order can be made, and workflows can be generated to ensure the uniqueness, authenticity, and timeliness of event processing.



Video Surveillance System

Overview

The video surveillance system monitors the video images of the substation in real-time, allows remote control to set inspection routes for automatic monitoring and supports video playback, split-screen playback, video projection, video replay, video control, preset position retrieval, cruise retrieval, video linkage, linkage recording, etc., and can perform alarm linkage with other subsystems.



Functions



Video Monitoring

It realizes monitoring of important equipment, equipment inspection, video image collection, and 24/7 high-definition video monitoring of the surrounding environment; supports access to video servers, NVR, RTSP, Ezviz Cloud, and LeChange Cloud, as well as access to visible light cameras, infrared cameras, and infrared card cameras.

Video Linkage

It supports combining system alarm events, real-time data, and control event operations to link camera preset position rotation, improving the intelligence of the system and helping users discover abnormal events and dangerous situations more accurately and quickly.



Video Replay

It supports combining system alarm events, real-time data, and control event operations to link camera preset position rotation, improving the intelligence of the system and helping users discover abnormal events and dangerous situations more accurately and quickly.

Linkage Record

It supports querying records of trigger conditions and execution conditions of linkage events in various time periods. Through linkage records, it helps users discover problems in a timely manner, reduces working time, improves efficiency, and provides an important reference for post-event traceability or analysis.



Smart Facilities

Overview

Through IoT technology, it conducts real-time monitoring of the fire protection, power distribution, elevators, water supply and drainage equipment, and operating environment under its management to ensure the reliable operation of the equipment, enhance the ability to handle abnormal situations, improve the property management level and service capabilities, and reduce equipment maintenance costs.



Functions



Smart Street Light

Real-time monitoring and remote control of urban street lights, supporting switching, dimming, scene adjustment, and scheduled operation. Automatically turns lights on/off based on environment and preset schedules, with intelligent switches for personalized area control.

Smart Lighting

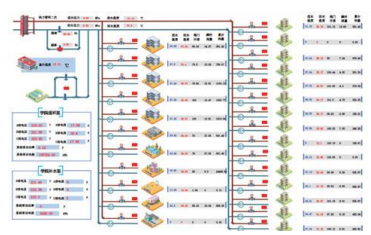
Enables remote centralized and local control of lighting fixtures, with flexible, simple control schemes. Suitable for large parks, transportation buildings (high-speed rail, railway, bus stations, airports), commercial and residential buildings for lighting and scene control.

智能照明及热水器控制			
灯组名称	灯组1	灯组2	热水器
21000-01	ON (ON)	ON (ON)	热水器1
21000-02	ON (ON)	ON (ON)	热水器2
21000-03	ON (ON)	ON (ON)	热水器3
21000-04	ON (ON)	ON (ON)	热水器4
21000-05	ON (ON)	ON (ON)	热水器5
21000-06	ON (ON)	ON (ON)	热水器6
21000-07	ON (ON)	ON (ON)	热水器7
21000-08	ON (ON)	ON (ON)	热水器8
21000-09	ON (ON)	ON (ON)	热水器9
21000-10	ON (ON)	ON (ON)	热水器10
21000-11	ON (ON)	ON (ON)	热水器11
21000-12	ON (ON)	ON (ON)	热水器12
21000-13	ON (ON)	ON (ON)	热水器13
21000-14	ON (ON)	ON (ON)	热水器14
21000-15	ON (ON)	ON (ON)	热水器15

21000-01	21000-02	21000-03	21000-04
21000-05	21000-06	21000-07	21000-08
21000-09	21000-10	21000-11	21000-12
21000-13	21000-14	21000-15	21000-16

Air Conditioning Monitoring

Enables centralized management of air conditioning systems for energy saving and waste elimination, with real-time monitoring of operation data and status anytime, anywhere. The management center can remotely control air conditioners, triggering alarms for abnormal usage. Suitable for individual and central air conditioning scenarios.



HVAC Control

Suitable for parks, campuses, hospitals, factories and other places with heating pipe networks. Monitors indoor real-time temperature, installs electric control valves based on heating pipe network distribution, automatically adjusts valves to keep temperature within specified range, and reduces heating during non-working hours to maximize heat savings.



Generator Monitoring

Suitable for emergency generator monitoring in large parks, industrial enterprises, hospitals, etc. It centrally monitors generator operating conditions, stores collected data to form historical reports and curves, enables remote parameter setting and start control, ensuring stable generator operation.

Intelligent Operations

Overview

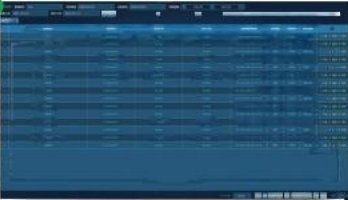
Intelligent operation and maintenance ensures substation safety, rapid maintenance, reliable power supply, and orderly power production. It manages tasks like inspection, defect elimination, alarm handling, and emergency repair, evaluating team timeliness and trajectories. During abnormalities, it dispatches optimal teams with real-time positioning to ensure maintenance efficiency. It records task assignment, execution, paths, and results, generating workflows to guarantee event processing uniqueness and authenticity.

Functions



Asset Management

Manages lifecycle of on-site/system equipment and ledgers for assets like transformers. Supports custom templates, multi-media storage, ledger operations, and maintenance deadline alerts for expiring/overdue equipment.



Operation and Maintenance Management

Tracks alarm elimination, inspection, defect elimination, and emergency repair tasks. Records work order processing via WEB/APP, supporting forwarding, processing, submission, review, and workflow. Enables one-click dispatch, batch operations, efficient handling, and closed-loop resolution of on-site hidden dangers.

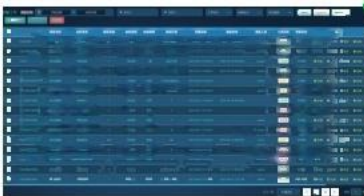


Alarm Management

Supports alarm event recording with access to details, emergency response plans, confirmation, and dispatching; also supports alarm clearance work order recording, allowing viewing of work order details, status, processing

Inspection Management

Supports inspection work order recording, allowing viewing of work order details, status, processing progress, and approval status.



Defect Management

Supports recording inspection and system defects, with access to details, status, processing and approval progress, and import of defect records; also supports defect work order recording, allowing viewing of work order details, status, processing and approval progress.

Work Order Analysis

Supports proportion analysis of assigned work order types, ratings, and processing status, as well as ranking of work order quantity and ratings.



System Operation

Overview

The platform operation module monitors system communication status in real-time, enabling self-maintenance. It records warnings/faults, dispatches tasks, recommends troubleshooting, and analyzes data to provide multi-dimensional rankings and proportions for focused attention on abnormal stations, circuits, and equipment. Combined with big data analysis, it conducts substation health checks based on multiple dimensions (e.g., transformer operation, load analysis, power quality, environmental suitability), generates evaluation scores and rational suggestions, and produces a summary report for operation and maintenance analysis.

Functions



System Equipment

Supports viewing the communication status of system devices, and querying real-time and historical data by gateway and acquisition device..

Communication Status

Supports viewing the communication status of system devices, and querying real-time and historical data by gateway and acquisition device..

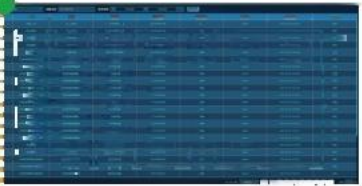


Operation Log

Supports querying system operation logs by different system modules, operators, operation types, operation statuses, and operation times, and allows export.

Operation Report

Supports querying system operation logs by different system modules, operators, operation types, operation statuses, and operation times, and allows export.



SVG Drawing

The system provides SVG image import and rendering, supports network communication topology display, and real-time online feedback of device communication status and real-time parameter query.

System Modeling

Modeling can be completed online through the web interface, enabling management of products and projects, as well as viewing and adding device models and data models.



Logo customization

Logo customization is available according to specific customer needs.



APP Function

The platform supports viewing functions such as user power monitoring, energy management, fire safety, operation and maintenance management, and payment inquiry on the mobile APP, which is synchronized with the WEB terminal.



Modular functional combination

The platform features flexible modular combinations, allowing users to customize or expand modules and function menus as needed, supporting modular design.

Application Scenarios



Office Building



Commercial Complex



Building&Park



Industrial&Mining



Railway Station



High-speed Railway Line



School



Hospital



Air Port



Maritime Port