

**JEZETEK**

# JEZETEK Software Embodied AI Product Catalog

Full-stack Solutions for Agents & Embodied AI Robots in Special Scenarios

**JEZETEK**

A Leading Force in AI Integration Applications for  
the Broader Security Domain



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All Identified. All Controlled.



JEZETEK is a leading provider of AI integration applications in the broader security domain. We focus on national defense security, public security, industrial safety, emergency response, and other critical fields. We deliver AI agents and embodied intelligent terminal products to drive the deep integration of artificial intelligence and the broader security domain.

**Top 100 in China's Software and IT Service Industry: Ranked #67**

**National, Provincial, and Municipal Laboratories & Innovation Platforms: 18**

**Industry Honors: 120+**

▶ Sichuan Provincial Science and Technology Progress Awards: 8 times

**Comprehensive Coverage of Military, Software, and Integration Foundational**

**Certifications**

▶ Core Certifications: 16 Categories

**Intellectual Property: 534+**

▶ Sichuan Provincial Patent Awards: 2 times

**Total Employees: 760+**

▶ R&D Technical Staff: 531

▶ Master's/PhD Ratio in AI Team: Over 80%

## AI Innovation Platforms

2025 Ministry of Industry and Information Technology Manufacturing Transformation Promotion Center

Sichuan Artificial Intelligence Institute · JEZETEK Joint Laboratory

JEZETEK - University of Electronic Science and Technology of China Industry-Academia-Research Joint Laboratory

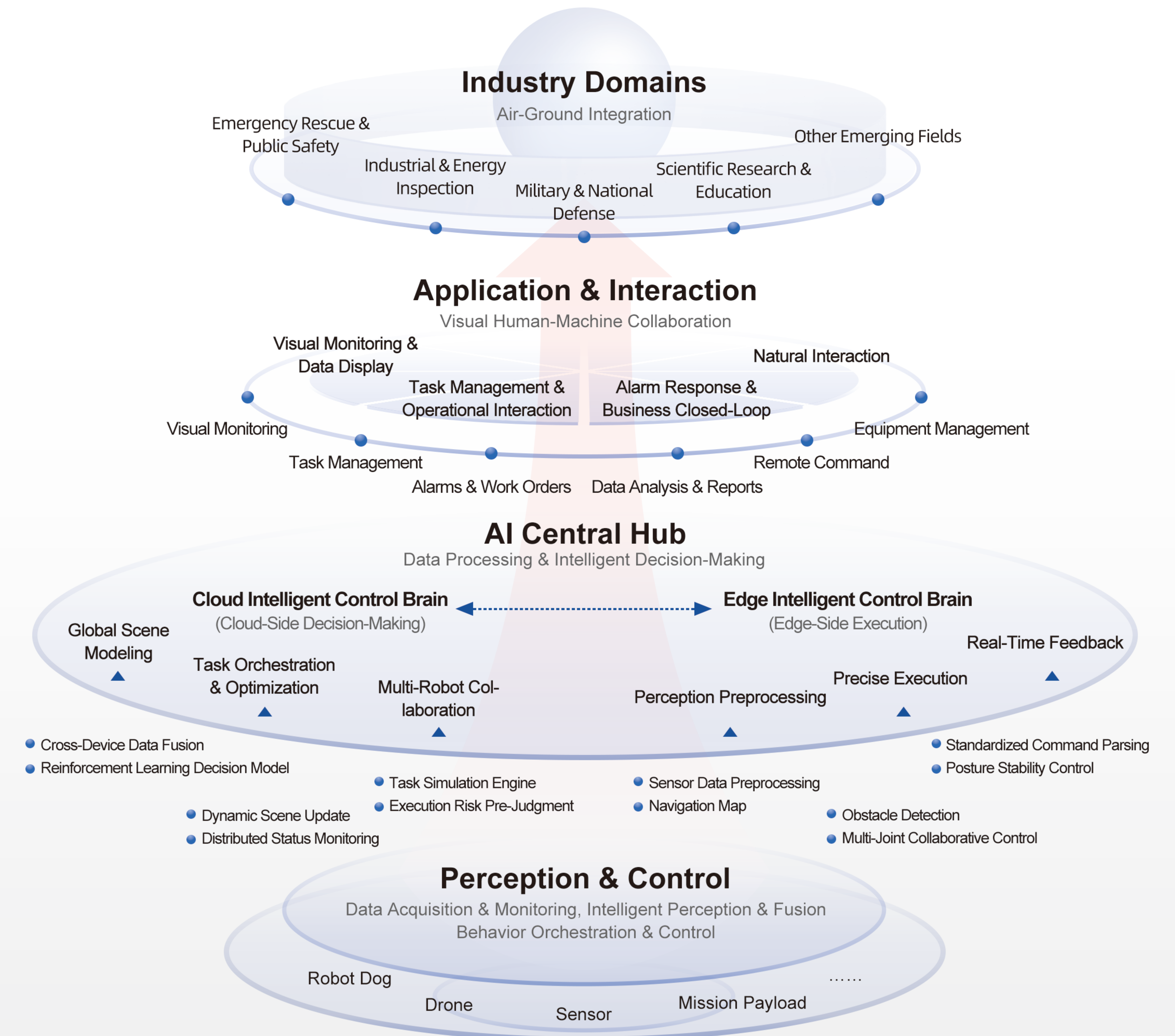
**JEZETEK Embodied Intelligence Pilot Production Base (Under Construction):** In collaboration with the government and Huazhong University of Science and Technology, building the first embodied intelligence innovation center covering the entire chain of "Data Collection → Pilot Testing & Verification → Testing & Evaluation → Inspection & Certification" in Southwest China.



# Jiuzhang Intelligent Control Platform

All Identified. All Controlled.

This is an intelligent task management platform for embodied intelligence robots, enabling cluster management and batch task scheduling. Its functionalities cover the entire process, including task creation, task monitoring, anomaly alarms, patrol point management, and task linkage. The platform supports unified management of various device types. Users can quickly configure tasks and monitor management through an intuitive interface, meeting the diverse needs of both single-device and multi-device complex tasks. Combined with a rich library of scenario algorithms, it can be widely applied in sectors like emergency management, industrial safety, and public security.





# APPLICATION CASE

## 01 One Brain, Multiple Controls

Cluster Scheduling, Global Intelligent Control

Can integrate various unmanned device resources (drones, robotic dogs, etc.), achieving two key capabilities: heterogeneous unmanned device cluster scheduling and global intelligent task decision-making control. The platform breaks down data silos of single devices and systems, aggregating real-time status information, environmental data, and task progress from all devices, realizing panoramic situational awareness on a single screen and centralized control of device clusters with one brain.



## 02 AI Decision-Making

Autonomous Planning and On-the-Fly Decisions

Based on a multi-algorithm fusion AI decision engine, the platform possesses strong autonomous planning capabilities. Upon receiving a task, it can automatically perform optimal calculations for task deconstruction, path planning, and resource allocation.



## 03 Natural Interaction

Issue Task Commands with a Single Sentence

Users do not need to perform cumbersome multi-step operations; they simply issue commands via voice or text (e.g., "Patrol the entire park and generate an inspection report"). The platform can automatically understand user intent and translate it into a sequence of executable specific tasks.



## 04 Intelligent Coordination

Seamless Cooperation Among Heterogeneous Unmanned Devices

Capable of uniformly scheduling and managing heterogeneous unmanned devices of different brands, types, and functions. Through unified communication protocols and scheduling algorithms, they can each perform their duties and cooperate seamlessly to accomplish complex tasks that no single device can undertake independently.



# Jiuzhang Sentinel

## Quadruped Robotic Dog Series

### 01 Jiuzhang Sentinel Intelligent Police Patrol Robotic Dog

An intelligent, all-weather unmanned patrol equipment designed to meet the practical needs of public security in the new era.

The "Jiuzhang Sentinel" Intelligent Police Patrol Robotic Dog features a built-in intelligent task brain and modular integrates surveillance balls and loudspeakers. It possesses core capabilities such as fully autonomous patrols, precise personnel surveillance, remote visual command, and officer escort support. Guided by the core concept of "Human-Machine Collaboration, Intelligent Efficiency Enhancement," this equipment effectively enhances the proactivity, precision, and all-weather responsiveness of public security prevention and control in complex scenarios. It assists in building a three-dimensional social security prevention and control system characterized by "Peacetime-Wartime Integration, Intelligence and Efficiency," providing strong support for advancing the modernization of public security work and the intelligentization of grassroots governance.

#### Product Advantages

- ▶ Equipped with an intelligent task brain, supporting fully autonomous navigation and dynamic path planning.
- ▶ Modular integration of high-definition surveillance balls, intelligent loudspeakers, and other payloads enables precise personnel recognition and remote visual command.
- ▶ Possesses officer escort support capability, enhancing human-machine collaborative operational effectiveness.
- ▶ Operates in all weather conditions and on all terrains, significantly improving the proactivity, precision, and response efficiency of public security prevention and control in complex environments.

#### Application Scenarios

Suitable for scenarios such as routine patrols in key areas, security for large-scale events, and initial response to emergencies. It helps build a "Peacetime-Wartime Integration, Intelligent and Efficient" three-dimensional social security prevention and control system, supporting the modernization of public security work and the intelligent transformation of grassroots governance.



Standing Dimensions (L×W×H): 1000mm × 470mm × 700mm  
 Total Weight: 59kg  
 Maximum Payload: 85kg  
 Maximum Walking Speed: 1.7m/s  
 Maximum Running Speed: 4m/s  
 Unloaded Endurance: 4h  
 LiDAR: Industrial-grade model X4  
 Maximum Incline for Climbing: ±30°  
 Maximum Step Height for Climbing: 25cm  
 Maximum Step Angle for Climbing: ±45°  
 Endurance with 20kg Payload: 2.5h  
 Operating Environment Temperature: -20°C ~ 55°C

### 02 Jiuzhang Sentinel Energy Inspection Robotic Dog

A domestically developed intelligent inspection equipment for new-type industrialization construction, empowering unmanned maintenance in high-risk, complex industrial scenarios.

The Jiuzhang Sentinel Energy Inspection Robotic Dog is equipped with a self-developed intelligent task brain, supporting fully autonomous navigation, dynamic path planning, and adaptive movement on complex terrain. It integrates a T-type multi-spectral gimbal (visible light + infrared) and an eco-friendly micro fire suppression device, enabling hazard identification and initial fire suppression. Based on AI algorithms, it can intelligently identify anomalies such as overheating, leaks, and deformations, issuing real-time alerts to improve early detection and handling capabilities. It exhibits excellent adaptability to high temperatures, high humidity, and confined spaces, effectively replacing human entry into hazardous areas, ensuring safety, and empowering unmanned maintenance and early emergency response for industrial facilities.



Standing Dimensions (L×W×H): 1000mm × 470mm × 700mm  
 Total Weight: 59kg  
 Maximum Payload: 85kg  
 Maximum Walking Speed: 1.7m/s  
 Maximum Running Speed: 4m/s  
 Unloaded Endurance: 4h  
 LiDAR: Industrial-grade model X4  
 Maximum Incline for Climbing: ±30°  
 Maximum Step Height for Climbing: 25cm  
 Maximum Step Angle for Climbing: ±45°  
 Endurance with 20kg Payload: 2.5h  
 Operating Environment Temperature: -20°C ~ 55°C

#### Product Advantages

- ▶ Equipped with a self-developed intelligent task brain, supporting fully autonomous navigation, dynamic path planning, and adaptive movement on complex terrain.
- ▶ Modular integration of a T-type multi-spectral gimbal (visible light, infrared) and an eco-friendly micro fire suppression device enables simultaneous equipment status sensing, thermal hazard identification, and rapid initial fire suppression.
- ▶ Features AI-driven anomaly recognition (e.g., overheating, leaks, structural deformation) and real-time alerting, significantly improving early risk detection and handling capabilities.
- ▶ Possesses excellent adaptability to high temperatures, high humidity, dust, and confined spaces, effectively replacing human workers in high-risk areas, ensuring operational safety, and enhancing intelligent maintenance levels.

#### Application Scenarios

Widely used for intelligent inspection of critical infrastructure such as power generation/substations, transmission lines, mine tunnels, etc. It supports energy security supply, intrinsic safety improvement, and the modernization of emergency management systems, accelerating the transformation and upgrade of high-risk industries towards reduced-manning, unmanned, and intelligent operations.

## 03 Jiuzhang Cloud Leopard Industrial Inspection Robotic Dog

A domestically developed intelligent inspection equipment for new-type industrialization construction, empowering unmanned maintenance in high-risk, complex industrial scenarios.

The Jiuzhang Cloud Leopard Industrial Inspection Robotic Dog is equipped with a self-developed intelligent task brain, supporting fully autonomous path planning and dynamic obstacle avoidance. It modularly integrates advanced payloads like a T-type multi-spectral gimbal and an acoustic imaging camera, simultaneously collecting multi-modal data including visual, audio, and thermal imaging. Combined with AI algorithms, it automatically identifies anomalies such as leaks, overheating, and abnormal sounds, issuing real-time alerts to significantly improve early risk detection and handling capabilities. It exhibits excellent adaptability to high temperatures, high humidity, and confined spaces, effectively replacing human entry into hazardous areas, ensuring safety, and empowering unmanned maintenance of industrial facilities.

### Product Advantages

- ▶ Equipped with a self-developed intelligent task brain, supporting fully autonomous path planning and dynamic obstacle avoidance, enabling 24/7 continuous stable operation.
- ▶ Modular integration of payloads like a T-type multi-spectral gimbal and acoustic imaging camera enables simultaneous collection of multi-modal perception data (visual, audio, thermal).
- ▶ Based on AI algorithms, it achieves automatic identification of equipment anomalies (e.g., leaks, overheating, abnormal sounds) and real-time alerts, greatly improving early risk detection and handling efficiency.
- ▶ The whole machine protection rating reaches IP66, with excellent adaptability to high temperatures, high humidity, dust, and confined spaces, effectively replacing human workers in high-risk areas, ensuring operational safety, and enhancing intelligent maintenance levels.

### Application Scenarios

Widely used for intelligent inspection of critical infrastructure such as power generation/substations, transmission lines, mine tunnels, etc. It supports energy security supply, intrinsic safety improvement, and the modernization of emergency management systems, accelerating the transformation and upgrade of high-risk industries towards reduced-manning, unmanned, and intelligent operations.



Standing dimensions (L x W x H): 820mm x 430mm x 570mm	
Total weight: 33kg	Payload: 15kg
Maximum load capacity: 50kg	Maximum operating speed: 2m/s
Maximum slope gradient: 45°	Continuous stair height: 25cm
No-load endurance / mileage: 3h / 15km	Payload endurance / mileage: 2.5h / 12km
Battery charging time: 1.5h	Protection rating: IP66
Operating temperature: -20°C ~ 50°C	LiDAR: Industrial-grade model X2

## 04 Intelligent Inspection and Operation Robot

Based on a commercial robotic arm body, equipped with self-developed high-precision control algorithms, it can be integrated onto wheeled/legged mobile robots to achieve unmanned inspection and precise operation in industrial settings.

The Intelligent Inspection and Operation Robotic Arm System, equipped with self-developed high-precision control algorithms, focuses on motion control, visual positioning, compliant manipulation, and autonomous obstacle avoidance. It supports rapid integration onto various mobile robot platforms, including wheeled and legged types, enabling stable and reliable collaborative operation. Possessing industrial-grade practicality, it features precise positioning, rapid response, and high safety, meeting the demands for unmanned operation in complex industrial environments.

### Product Advantages

- ▶ Core self-developed algorithms: Focus on motion control, visual positioning, compliant manipulation, and autonomous obstacle avoidance algorithms, ensuring technological self-reliance and control.
- ▶ Multi-platform compatibility: Can be quickly integrated onto various mobile robot platforms (wheeled, legged, etc.), enabling stable and reliable collaborative operation.
- ▶ Industrial-grade practicality: Precise positioning, fast response, high safety, meeting the requirements for unmanned operation in complex industrial environments.

### Application Scenarios

Suitable for unmanned scenarios in industries such as power, energy, chemical, and manufacturing, including industrial inspection, switch operation, equipment operation, and environmental tasks.



Degrees of Freedom (DOF): 6	Rated Payload: 5kg
Robot Weight: 7.2kg	Repeat Positioning Accuracy: ±0.05mm
Working Radius: 610mm	Power Supply Voltage: DC24V
Protection Rating: IP54 (Robot Arm Body)	Power Consumption: Max. 200W, Typical 100W
Material: Aluminum Alloy	Maximum Joint Speed: J1-J2 180°/s, J3-J6 225°/s
Joint Motion Range: J1 ±178°, J2 ±130°, J3 ±135°, J4 ±178°, J5 ±128°, J6 ±360°	

# APPLICATION CASE



People's Daily reported on JEZETEK Software's robot dog and Jiuzhang Intelligent Control Platform.



Park Inspection



Sichuan TV News Broadcast featured a special report on the independently developed quadruped robot dog by JEZETEK Software.



Hydropower Station Inspection

# Jiuzhou Gongmei

## Rail Robot Series

### 01 Jiuzhou Gongmei Rail Bolt Robot

An intelligent, automated operation equipment for railway infrastructure maintenance.

The Jiuzhou Gongmei Bolt Rail Robot is suitable for steel rail bolt inspection and tightening. It features a built-in intelligent detection and operation system, modularly integrating electric wrenches and intelligent detection modules. It possesses core capabilities such as fully autonomous inspection, automatic tightening operations, remote monitoring, and data return. Guided by the core concept of "Intelligent Operation and Maintenance, Safety Assurance," this equipment enables all-weather automated operation, effectively improving the efficiency and accuracy of railway line maintenance. It reduces risks associated with inefficient manual inspections and operation in harsh environments, helping to build a modern railway infrastructure maintenance system characterized by "High Efficiency, Precision, Intelligence, and Reliability."

#### Product Advantages

- ▶ Equipped with an intelligent detection system, supporting high-precision bolt positioning.
- ▶ Modular integration of payloads like electric wrenches enables automatic tightening and status recording.
- ▶ Possesses autonomous obstacle avoidance capability, adapting to complex track conditions.
- ▶ All-weather, all-terrain operation, significantly enhancing the safety and operational efficiency of railway maintenance.

#### Application Scenarios

Applicable to scenarios such as daily railway track inspection, bolt loosening/tightening maintenance, and operation during nighttime maintenance windows. It aids in achieving the intelligent upgrade of railway infrastructure maintenance, ensuring railway transportation safety.



- Working State Dimensions (L×W×H): 560mm × 370mm × 420mm
- Battery Capacity: 36V 48Ah
- Operating Temperature: -15°C ~ 40°C
- Socket Center Distance: 214/235 ±0.5mm
- Maximum Travel Speed: 5 Km/h
- Work Efficiency: ≤7 seconds/set
- Safety (Insulation Performance): ≥90 MΩ
- Total Weight (without battery): Less than 45kg
- Control Methods: Host button control, remote control
- Tightening Torque: 80~150 N·m (adjustable)
- Maximum Loosening Torque: ≥850 N·m
- Battery Efficiency: >1000 sets (loosen or tighten)

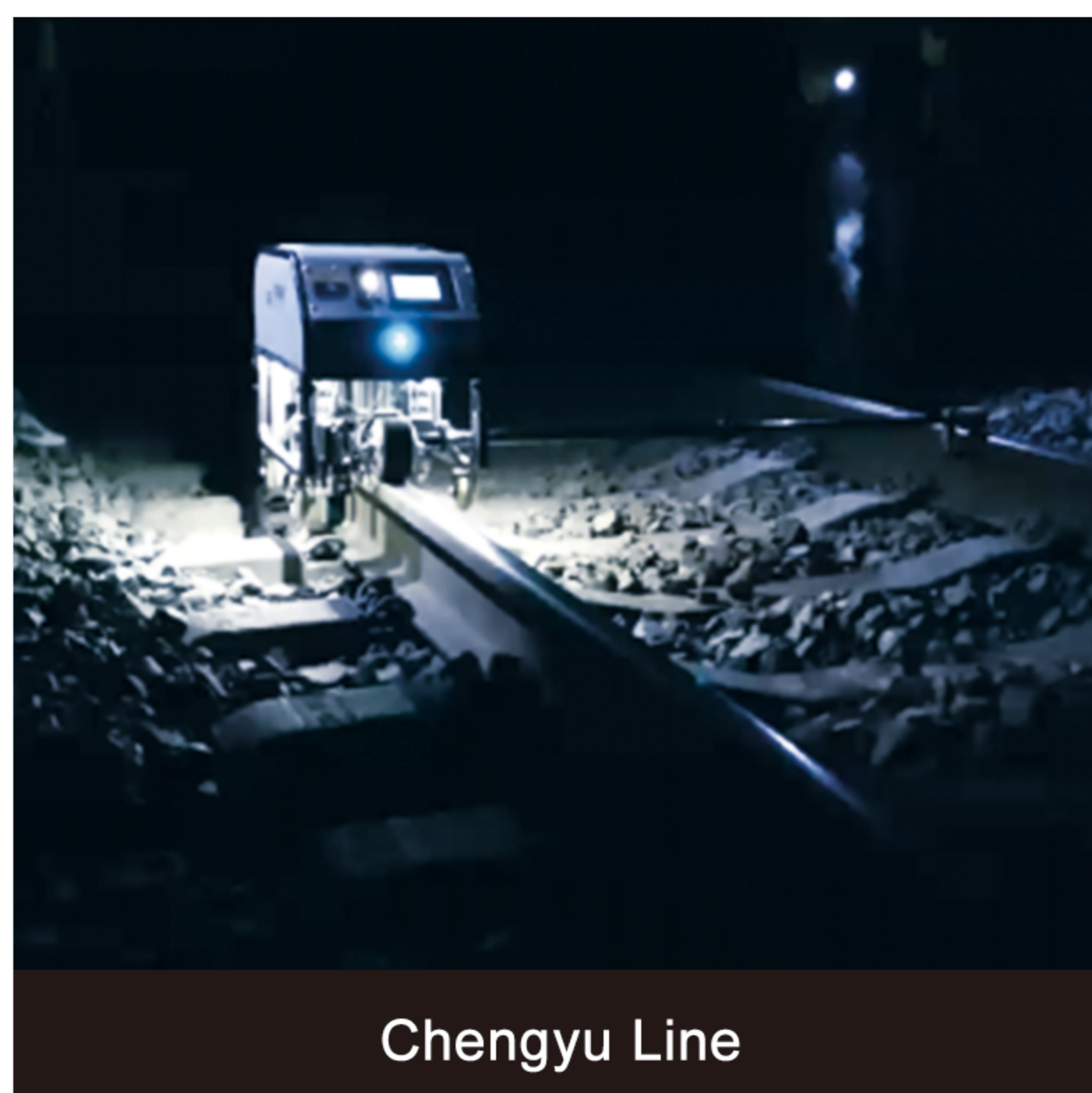
## APPLICATION CASE



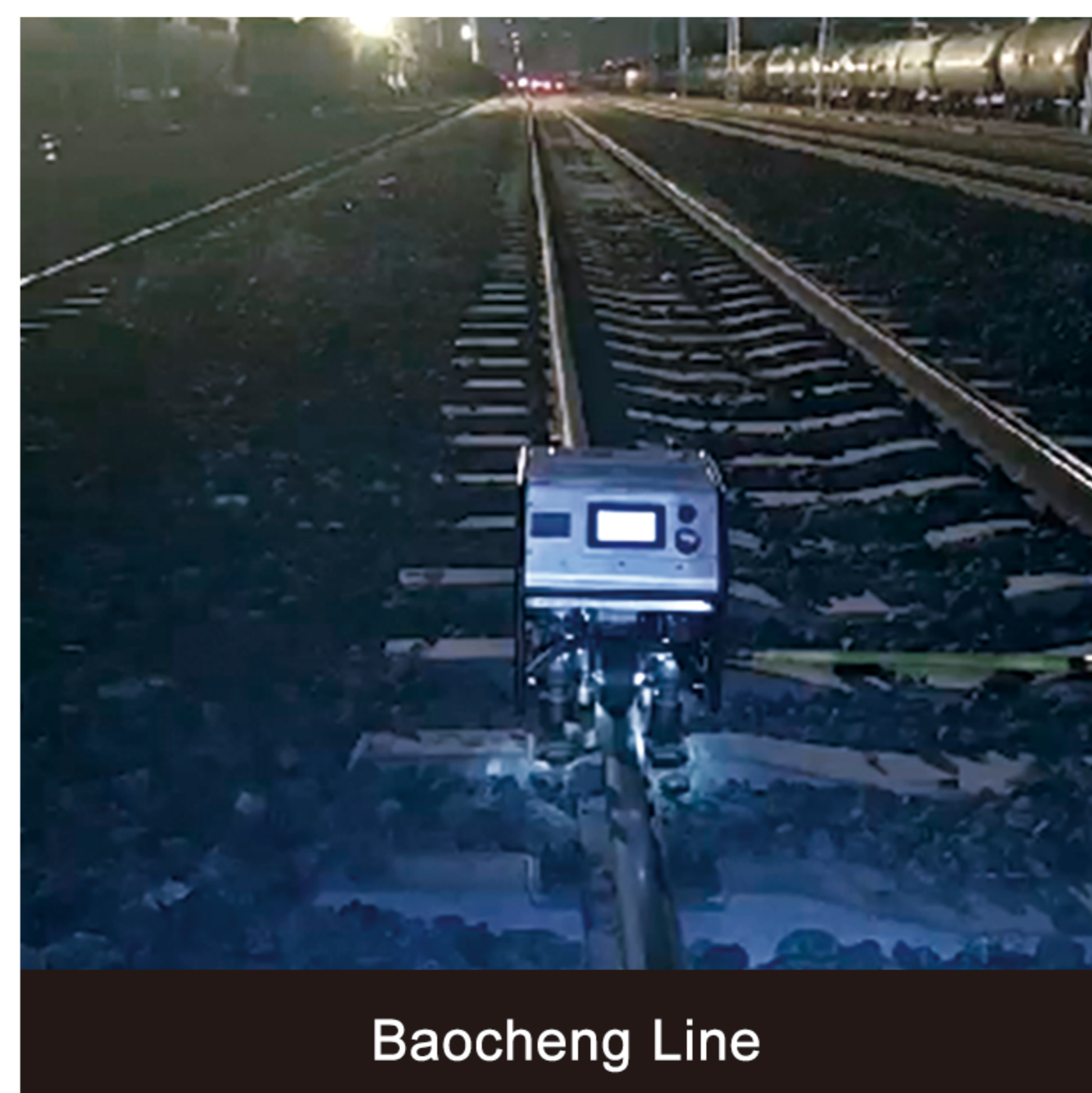
Xiyuan Line



Qinghai-Tibet Line



Chengyu Line



Baocheng Line

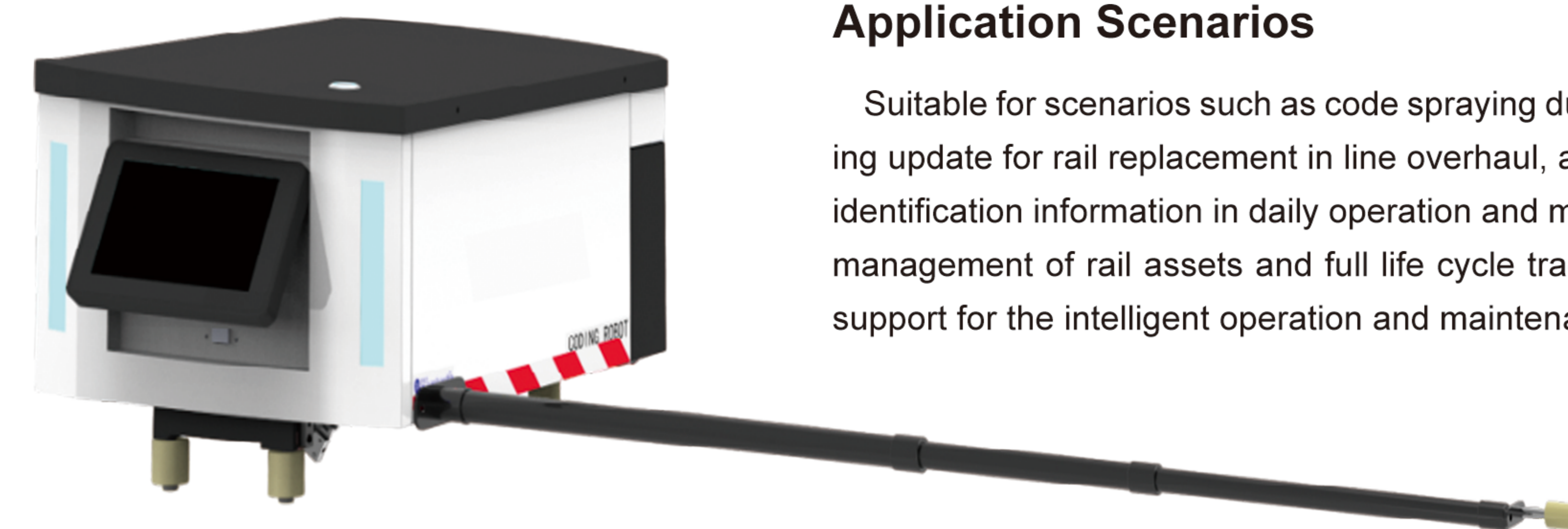
## 02 Jiuzhou Gongmei Rail Web Coding Robot

An intelligent, automated marking operation equipment for the lifecycle management of railway rails.

The Jiuzhou Gongmei Rail Web Coding Robot is suitable for spraying key characters (e.g., versine, super-elevation) on the rail web, addressing issues with manual operation such as non-standard fonts, error-proneness, and low efficiency. The device uses lithium battery power, featuring functions like automatic travel, automatic spraying, and data transmission/import, resulting in high operational efficiency and standardized spraying.

### Product Advantages

- ▶ Equipped with an intelligent visual recognition system, achieving precise positioning of the rail web area and adaptive adjustment of spraying angle.
- ▶ Modular integration of industrial-grade high-resolution spray coders and other payloads, supporting online spraying of various characters and QR codes.
- ▶ Adapts to complex environments including ballasted tracks, ballastless tracks, and turnout areas.
- ▶ Stable all-weather, all-terrain operation; clear and durable spray marks; real-time return of operational data, supporting the full lifecycle traceability of rails.



### Application Scenarios

Suitable for scenarios such as code spraying during new railway rail laying, marking update for rail replacement in line overhaul, and supplementary spraying of rail identification information in daily operation and maintenance. It helps realize digital management of rail assets and full life cycle traceability, and provides basic data support for the intelligent operation and maintenance of railway infrastructure.

## APPLICATION CASE



Guizhou Liupanshui



Yunnan Kaiyuan



# Jiuzhang Lingyu

## Cleaning Robot Series

### 01 Insulator Cleaning Robot

A high-efficiency, safe, and intelligent specialized equipment for the unmanned cleaning of locomotive insulator equipment.

The Insulator Cleaning Robot features a built-in ROS-based intelligent task scheduling system, modularly integrating a high-precision robotic arm, a vision recognition unit, and a micro-cleaning device. It possesses core capabilities such as fully automatic rail movement, vehicle model adaptive recognition, multi-insulator path planning, and low-water-consumption cleaning. Guided by the core concept of "Unmanned Operation, Precision and Efficiency," this equipment effectively addresses industry pain points like high risks of manual high-altitude cleaning, inconsistent quality, and lengthy maintenance time occupation. It provides a fully unmanned, highly reliable, automated cleaning solution for the roof insulators of electric locomotives and EMUs.



#### Product Advantages

- ▶ Equipped with an intelligent task brain, supporting fully autonomous rail movement, dynamic path planning, and multi-model adaptive operation.
- ▶ Multi-modal fusion navigation and precise positioning: Integrates visual recognition and rail movement control technologies, achieving rail repeat positioning accuracy  $\leq \pm 5\text{mm}$  and robotic arm end-effector accuracy  $\leq \pm 2\text{mm}$ , ensuring precise alignment between the robotic arm and roof insulators.
- ▶ Modular integration of high-precision vision guidance and micro-cleaning technology, enabling real-time recognition of insulator type, position, and posture, achieving ultra-low water consumption and full-coverage cleaning.
- ▶ Features centralized task scheduling and full-process safety monitoring. After one-click start, the robot automatically completes the entire process: positioning, recognition, cleaning, and reset.

#### Application Scenarios

Widely used for automatic cleaning of roof insulators in electric locomotive and EMU maintenance depots, suitable for mixed-operation scenarios with different vehicle models. This product can effectively replace manual labor in high-intensity, high-risk high-altitude cleaning work, promoting the transformation and upgrade of railway power supply safety towards an unmanned, intelligent operation and maintenance model.



Vehicle Adaptability: Adapts to  $\geq 3$  mainstream electric locomotive / EMU models; supports customization  
 Positioning Accuracy: Orbit repeated positioning:  $\leq \pm 5\text{ mm}$ End positioning:  $\leq \pm 2\text{ mm}$   
 Cleaning Efficiency:  $\leq 30$  seconds per insulator  
 Water Consumption:  $\leq 50\text{ mL}$  per insulator  
 Operation Mode: One-key start, unmanned operation throughout the whole process.  
 Operating Environment: Suitable for standardized operation tracks in the depot.

### 02 Optical Mirror Cleaning Robot

An intelligent, unmanned cleaning specialized equipment for the full lifecycle cleanliness requirements of precision optical equipment.

The Optical Mirror Cleaning Robot, based on a high-precision force-controlled robotic arm and a visual perception intelligent system, modularly integrates a lint-free cloth grabbing mechanism and a cleaning agent automatic spraying device. It possesses core capabilities such as large-area autonomous cleaning, micro-force-controlled zero-damage wiping, and millimeter-level cleanliness detection. Guided by the core concept of "Precise Operation, Zero-Damage Cleanliness," this equipment effectively addresses industry pain points like high risks, low efficiency, and inconsistent quality in manual cleaning under elevated or harsh environments. It provides a fully automated, high-cleanliness intelligent cleaning solution for optical mirrors.

#### Product Advantages

- ▶ Equipped with a high-precision force-controlled robotic arm, supporting adjustable contact force of 0.5-5N and end-effector low-vibration control of less than 0.3mm, ensuring zero scratches on optical mirrors during the cleaning process.
- ▶ Integrated with high-precision visual detection capability, supporting automatic recognition of minute particles as small as 0.5mm in diameter and closed-loop control of the cleaning operation.
- ▶ Features automatic cleaning agent spraying and lint-free cloth grabbing functions, supporting multiple low-intensity cleaning cycles to effectively remove various types of stains.
- ▶ High environmental adaptability design, with IP54 protection rating and a wide operating temperature range of  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ .

#### Application Scenarios

Widely used in multi-process mirror cleanliness treatment during optical component manufacturing, as well as for regular cleaning and protection of large photoelectric equipment surfaces (e.g., laser windows, astronomical telescope lenses). It supports the performance maintenance and long-term reliable operation of precision optical equipment in complex environments.

Robotic Arm Reach: $\geq 0.9\text{m}$	Force Control Range: 0.5-5N (adjustable)
Robotic Arm Weight: 23kg	End-Effector Vibration: $< 0.3\text{mm}$
End-Effector Payload: $\geq 5\text{kg}$	Particle Detection Resolution: $\leq 0.5\text{mm}$
Repeat Positioning Accuracy: $\leq 0.1\text{mm}$	Waterproof Rating: IP54



## APPLICATION CASE



Research Institute Mirror Surface Cleaning Project