







## Intelligent Inspection Wheeled Robot

### Product Description

The intelligent inspection robot conducts inspections in special locations such as chemical plants and oil refineries through all-weather autonomous patrolling. The robot combines multiple navigation methods and utilizes infrared thermal imaging and high-definition camera technology to promptly detect hazardous gas leaks and temperature anomalies. It also performs automatic analysis of instruments and valves, records and uploads equipment information through image comparison analysis, and provides abnormality alerts.

### Performance Characteristics

-  Autonomous Navigation
-  Intelligent Scheduling
-  Automatic Obstacle Avoidance
-  Explosion-proof and Waterproof Design
-  Risk Prevention
-  Abnormal Alarm



### Product Features

- 1 All-weather Autonomous Patrolling and Multi-navigation Methods**  
Combining inertial navigation, BDS navigation, laser navigation, and other methods, the robot achieves precise positioning and autonomous patrolling in complex environments, ensuring any potential issues can be promptly detected and addressed.
- 2 Explosion-proof and Waterproof Design with Automatic Obstacle Avoidance and Overcoming**  
The robot features an explosion-proof and waterproof design, ensuring normal operation in various harsh environments. It also has automatic obstacle avoidance and overcoming functions, guaranteeing safe and smooth patrolling.

### 3 Automatic Analysis and Gas Detection Functions

The robot can perform real-time monitoring and abnormality warnings for instruments, meters, and valves. It promptly detects hazardous gas leaks and uses image comparison and temperature difference identification technologies to comprehensively identify and handle potential risks.

### 4 Day and Night Infrared Recognition with High Efficiency and Reliability

Equipped with day and night infrared recognition capabilities, the robot provides all-weather monitoring. It effectively replaces inspection personnel for comprehensive inspection of equipment and environments, significantly reducing labor intensity, lowering safety risks, and greatly enhancing inspection efficiency and reliability.

## Product parameters

	Project Name	unit	details
/	Exterior Dimensions	mm	800*700*700
	speed	Km/h	0-6.5
	obstacle avoidance distance	m	0-1.0
	Power Supply	VDC	48
	Weight	KG	160
	Obstacle Clearance Height	cm	10
	Servo Motor	W	400W*2
	Continuous Working Time	h	>5
Optional Package (Customizable)	Navigation Sensor	/	Inertial Navigation, BDS Navigation, Laser Navigation
	Obstacle Avoidance Sensor	/	Laser Obstacle Avoidance Device, Infrared Sensor
	Scheduling System	/	Host Computer Software Scheduling System
	Automatic Navigation Control	/	Customizable Automatic Control System Based on Environment

## Application Scenarios



Intelligent inspection in industrial parks



Intelligent inspection in substations



Intelligent inspection in chemical plants



Intelligent inspection in petrochemical tank farms