



SERVICE SYSTEM

					
One-Stop Customized Farming Solutions	Farm Site Selection Layout Plan	Farming Skills Training Remote Consultation	Professional After-Sale Service 24-hour Service Hotline	Tracking & Survey	Online Technical Training



The Forerunner and Pioneer of Digitizing Farm Management
The Provider of Digitizing Farming System Service



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BLIND-FREE CHICKEN HOUSE INSPECTION

CHICKEN HOUSE VISION-INSPECTION ROBOT(SHEEPDOG)

VISUAL INSPECTION ROBOT

**Blind-Free
Chicken
House
Inspection**



PRODUCT INTRODUCTION

The chicken house inspection robot is an all-terrain and blind-free inspection robot developed based on our intelligent farming system, to provide customers with one-stop farming solution. Relying on our digitizing farming platform and data-analysis platform, it can help customers to realize intelligent remote inspection for modern, digitizing, and labor-free farming.

Overall Dimension	1000*580*1600~3200mm
Total Weight	200KG
Observed Tiers	3-5 tiers
Identification Range	0.8m*1.0m
Identification Time	1s
Battery Life/Charging Time	10h/2h
Running Speed	0.2m/s 0.5m/s(max)
Working Noise	30dB
Battery Capacity	48V 100Ah
Communication Mode	WiFi2.4GHz/5G
Inspection Mode	Fully Automatic
Navigation Mode	RFID Magnetic Nails



ADVANCED SOLUTIONS

✓
Improve the competitiveness and productivity of farming enterprises

✓
Minimizing high labor and time cost of farm inspection

✓
Detection of chicken abnormal conditions that can not be detected manually

OVERALL ADVANTAGES



PRODUCT FUNCTION

FUNCTIONS	DESCRIPTION	CONFIGURATION	DESCRIPTION
Dead Chicken Identification	Locating and marking dead chickens features	Regular Type	
Dead Chicken Analysis	Cloud platform to generate distribution map of dead chickens	Regular Type	
Environment Collection	Environment data collection of temperature, humidity, ammonia, hydrogen sulfide, CO2, dust density	Optional Equipment	
Environment Analysis	The cloud platform supports the environment cloud image for environment analysis	Optional Equipment	
Weak Chicken Identification	Low activity, long-term resting, chicken head anomaly and other states	Optional Equipment	
Sterile Chicken Identification	Visual analysis of the comb	Optional Equipment	
Eggs Calculation	Numbers counts per cage	Optional Equipment	
Dirty Eggs	Obvious dirty blood spots of eggs	Optional Equipment	Onsite Environment Check Needed
Extra-large/Extra-small Eggs	Extra Large/Extra Small Eggs	Optional Equipment	Onsite Environment Check Needed
Soft Eggs	Obvious differences between shellless and regular eggs	Optional Equipment	Onsite Environment Check Needed
Equipment Analysis	Equipment surface anomaly analysis, cage mesh deformation(applicable to our equipment)	Optional Equipment	Onsite Environment Check Needed
Temperature Identification	Higher level camera is optional for far infrared recognition of chicken surface temperature	Optional Equipment	High Quality Camera Needed
Manure Identification	To be confirmed based on job site equipment conditions	Optional Equipment	Onsite Environment Check Needed
Shape Identification	Obvious side fall of chicken head and low activity	Optional Equipment	
Voiceprint Identification	Sound collection of Chicken breath	Optional Equipment	
Live Camera	Fluorite cloud spherical camera, 360° blind-free monitoring	Optional Equipment	

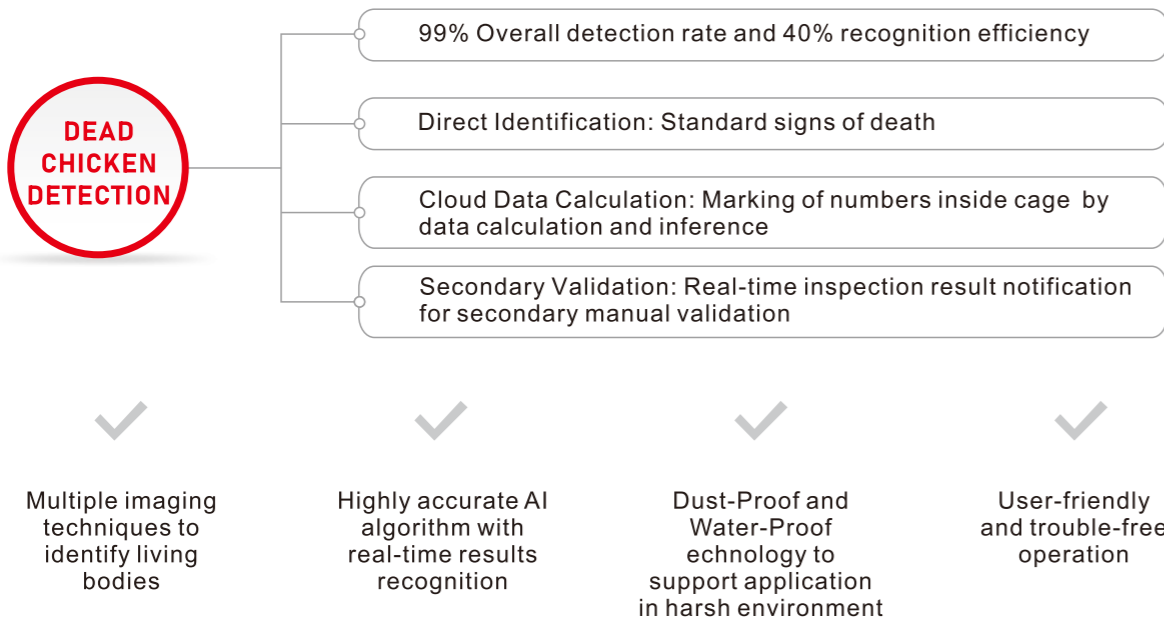
Blind-Free Chicken House Inspection

DEAD CHICKEN DETECTION



Blind-Free Chicken House Inspection

DEAD CHICKEN DETECTION

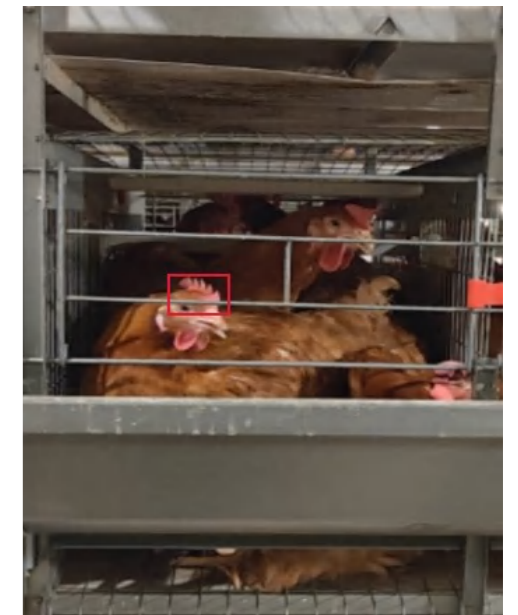


CHICKEN COMB RECOGNITION Comb stands upright without falling

CHICKEN EYES IDENTIFICATION Under secondary updating

CHICKEN BEAK IDENTIFICATION Under secondary updating

DATA CALCULATION Eggs counting according to the number of cage marks, multi times comparison of the numbers to mark the sterile chickens



Steady Over 100 layers of AI vision detection system with special tuning technology, adapting to different light changes

Trouble-Free Trouble-Free operation under the point-and-shoot guidance of the software, to complete the sample study and identification easily. Complex identification can be done with AI system based on customer demand

Accurate Higher than 93% accuracy of human eyes, the system accuracy can be higher than 99%



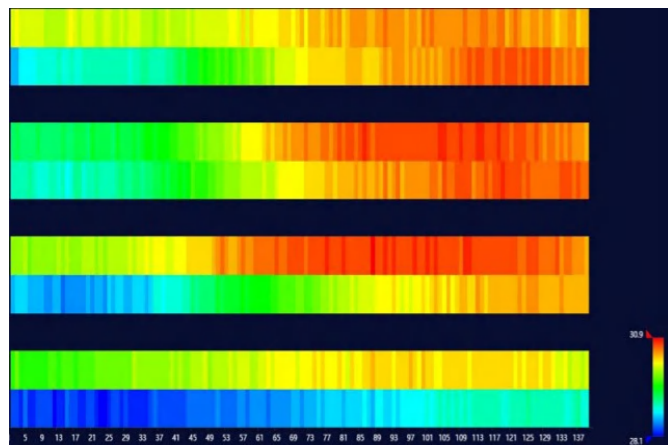
Blind-Free Chicken House Inspection

ENVIRONMENT DETECTION



Blind-Free Chicken House Inspection

ENVIRONMENT DETECTION



The inspection robot will report the real-time environment data and images while running inside the chicken house. The environment cloud map will help the customers to monitor the high/low temperature in real time, and adjust parameters of the climate controller to minimize the temperature difference inside chicken house

Real-time equipment inspection

- Deformation of egg belt supporter
- Dirt on bottom mesh
- Feed trough deformation and foreign matter
- Waterline leak
- Fan operating condition
- Unclosed cage doors
- ...



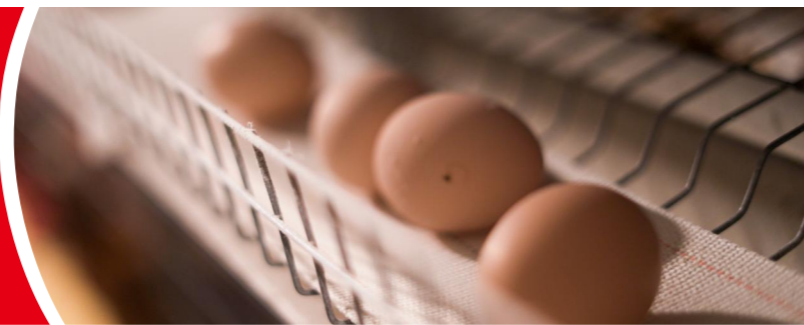
Environment Parameters

- Temperature:-40-60°C
- Humidity:0-100%
- Ammonia(NH3):0-50ppm
- Hydrogen sulfide:0-50ppm
- Sunlight:0-65535Lux
- CO₂:0-5000ppm
- PM2.5:0-999ug/m³
- PM10:0-999ug/m³



Detection only apply to POUL TECH devices, shape confirmation is needed on site for third-party devices

Blind-Free Chicken House Inspection
EGG DETECTION (EXTENDED FUNCTION)



✓
Obvious dirty of eggs

✓
Numbers counts per cage

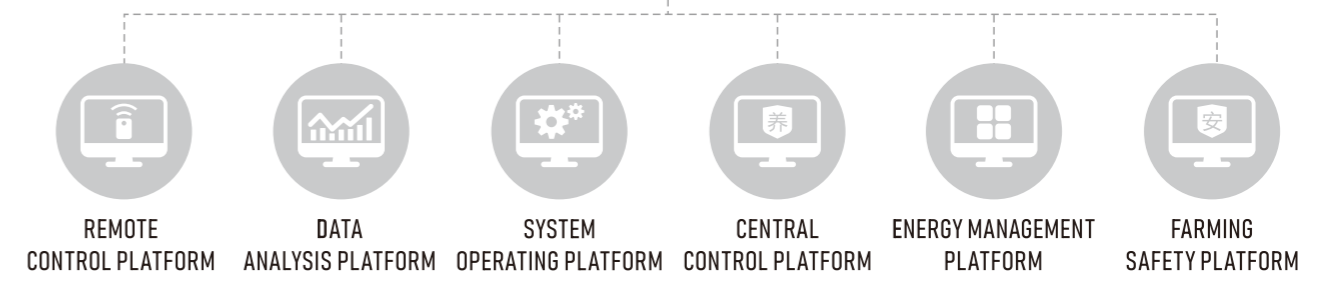
✓
Extra-big/small eggs detection

✓
Soft eggs detection



Egg detection from vision-inspection robot needs onsite confirmation by our technician

DIGITIZING CLOUD SERVICE PLATFORM



APPLICATION TERMINALS
 (Data center, monitoring screen, computer, pad, mobile phone)

POUL TECH is dedicated to empower intelligent farming for poultry enterprises with one-stop solution to integrate all sections for cost-efficient benefits. Doing more with less for sustainable growth!