



SMALL INSECT CONDITION MONITORING LAMP 6



Product Overview

Zhice Yunlian SMALL INSECT CONDITION MONITORING LAMP 6 adopts optical, electrical and numerical control technologies to realize functions including pest trapping, pest killing and sample sorting. It is designed with an internal anti-escape maze structure to ensure high pest trapping efficiency.

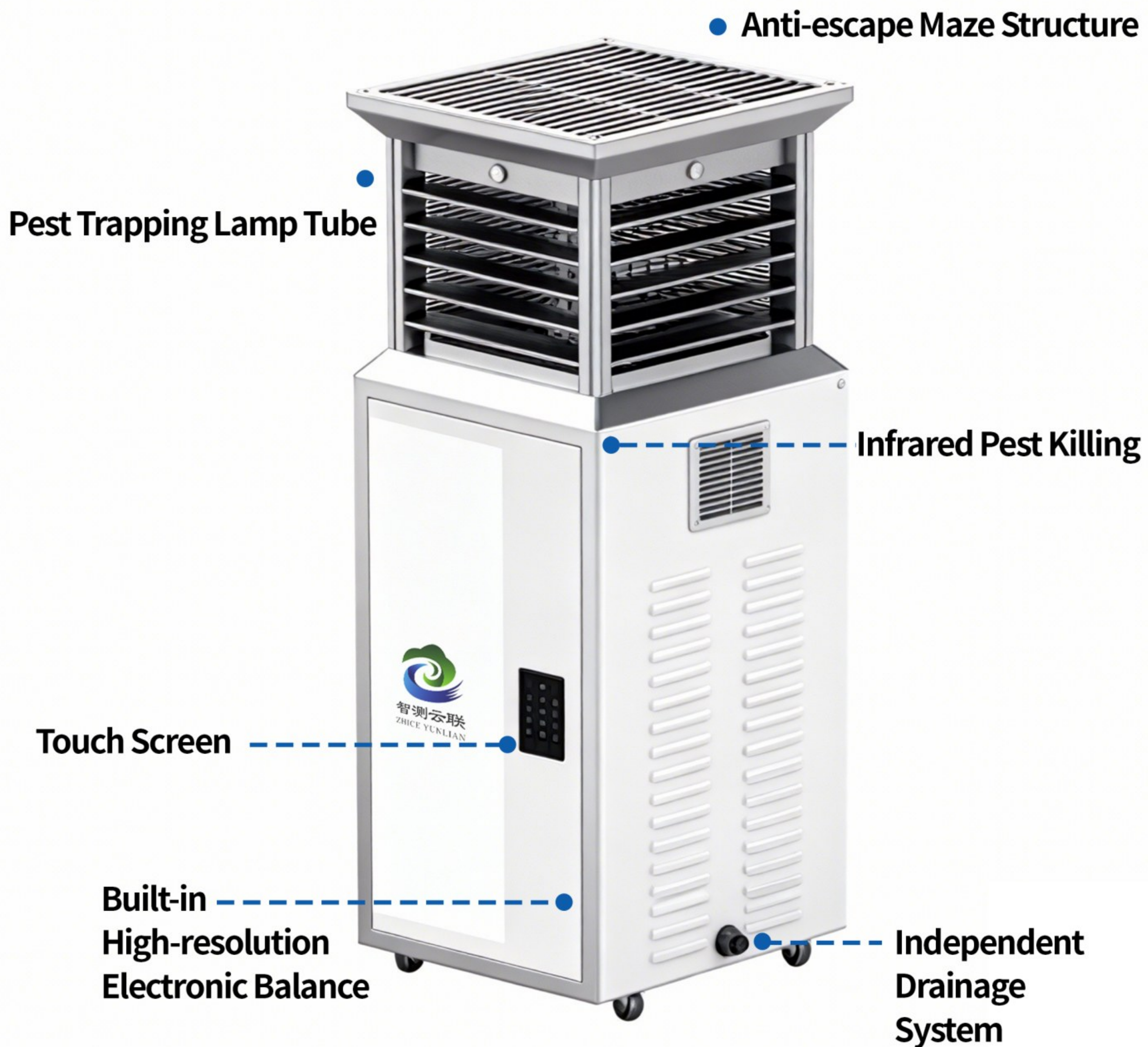
Under unattended operation, it can automatically complete the full workflow of pest trapping, pest killing, insect body dispersion, photographing, sample transportation, specimen collection and rainwater drainage. With wireless transmission and Internet of Things (IoT) technologies, it uploads real-time environmental meteorological data and pest infestation status to the designated agricultural cloud platform.

Core Functions & Advantages

- Pest Trapping
- Three-layer Filter Screen
- Fumigation-based Pest Killing
- Timing Control Module
- Accurate Monitoring
- All-in-one Integration
- Data Visualization Platform
- Reliable Data Transmission



Product Structure



Product Specifications

Item	Detailed Description
Core Technology	Integrates optical, electrical and numerical control technologies to realize automatic control
Anti-escape Design	Internal anti-escape maze structure to improve pest trapping success rate
Insect Weighing Function	Equipped with a high-resolution electronic balance to weigh insect bodies after infrared treatment; weight data is uploaded to the platform to support pest trend statistics
Control System	7-inch color Chinese LCD capacitive touch screen operation; supports time-phased setting and control, dual modes of automatic / manual photographing
Image Acquisition	Built-in 48-megapixel camera image acquisition equipment, supports low-light imaging; transmits data to the server via TCP/IP, can identify common pests, and image clarity meets the requirements of intelligent insect species identification
Remote Management	Remotely view equipment operation status, perform remote control and set terminal equipment parameters via the cloud platform
Manual Control Function	Manually control the trapping lamp switch, upper insect dropping switch, lower insect dropping switch, heating switch, photographing, insect sweeping and other functions
Temperature Control	Automatic temperature control of the heating chamber, with adjustable heating temperature and duration
Light Control Function	Automatically turns on at night and switches to standby mode during the day
Rain Control Function	Adopts louver structure to prevent rainwater from entering (no water accumulation in the cabinet); automatically stops working (stands by) on rainy days
Time Period Control	Working time periods can be set according to the living habits of target pests
Working Mode	Supports four modes: debugging mode, normal mode, time mode, forced mode
Networking Mode	Default 4G networking, optional RJ45 wired network

Technical Parameters

Parameter	Specification
Power Supply Voltage	DC12V $\pm$ 10% or solar power supply
Power Consumption	Standby power $\leq$ 15W; total lamp power $\leq$ 150W
Data Transmission Mode	4G / wired network
Impact Screen	Arranged at 90° to each other; single screen size: 338mm (L) $\times$ 80mm (W) $\times$ 5mm (T)
Lamp Start-up Time	Starts within 1s
Heating Temperature	Reaches 85 $\pm$ 5°C after about 15 minutes of operation
Insulation Resistance	$\geq$ 2.5M Ω
Overall Dimension	400mm $\times$ 400mm $\times$ 1200mm
Design Service Life	$\geq$ 3 years
Camera Pixel	48 megapixels



Introduction to the upper computer software

Function Category	Specific Description
Core Functions	Realize integrated management of data reception, storage, viewing and analysis in the PC standalone environment
Data Reception and Processing	1. Support data reception via serial port, as well as data processing and visual display 2. Compatible with communication methods such as JSON string and MODBUS485
Parameter Configuration	1. Allow independent setting of data storage time 2. Support custom collection time in MODBUS485 collection mode
Monitoring Parameter Management	Support users to independently add, delete and modify monitoring parameters, including information such as parameter protocols, names and icons
Data Processing Expansion	1. Equipped with data post-processing function 2. Support external running of JAVASCRIPT scripts



Introduction to Cloud Platform

Function Category	Specific Description
Architecture & Access Method	Adopts a CS architecture software platform, supporting direct access and observation via mobile phones and PC browsers without additional software installation
Account & Device Management	Supports multi-account and multi-device login, meeting the collaborative management needs of multiple users and terminals
Data Display Function	1. Provides dashboards for real-time data display and historical data display 2. Supports data curve analysis 3. Supports map display and device information viewing
Data Storage & Stability	Implements cloud data storage based on cloud servers, featuring stability, reliability, easy scalability and load balancing
Alarm & Threshold Management	Supports SMS alarm function, allowing custom alarm threshold settings to respond to abnormal data in a timely manner
Data Processing & Output	1. Supports data export in table format 2. Has data post-processing function 3. Supports external running of JAVASCRIPT scripts to enhance customization capabilities
Data Forwarding Function	Supports data forwarding via multiple protocols, including HJ-212 protocol, TCP forwarding, HTTP protocol, etc.

