

WAREHOUSE PEST TRAP

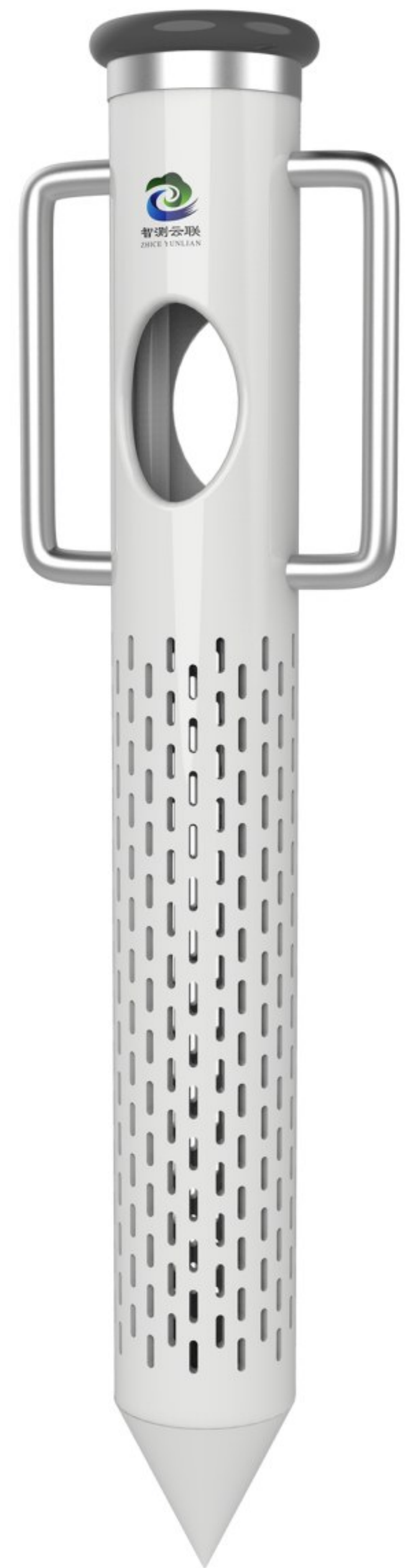
Introduction

The warehouse pest trap is an eco-friendly control device designed for stored grain pests. Made of food-grade plastic, it consists of three parts: a trapping lamp, a main trap body and a trapping tray.

The device features a conical structure with an ergonomic handle on the top, a perforated light-transmitting wall in the middle, and a trapping tray at the bottom. It is suitable for various bulk grain storage facilities such as shallow silos and vertical silos. It can trap and kill a wide range of stored grain pests including booklice and maize weevils, achieving pollution-free green pest management.

Features

- 1. Broad-spectrum trapping:** It traps and kills moths, booklice, maize weevils and other stored grain pests within a 10-meter radius, and pests are unlikely to develop resistance.
- 2. Early warning:** It detects pests inside the grain bulk 2-3 months in advance and pinpoints the outbreak location, providing a basis for precise pest management.
- 3. Safe and eco-friendly:** Adopts food-grade material and low-toxic, residue-free attractant. It has no direct contact with grain, no safety hazards and no environmental pollution.
- 4. Convenient and durable:** Easy to operate for grain surface work. It can be used year-round without affecting normal granary operation, and works normally even in low-temperature environments.



Structure

Top End Cap Assembly

Sealed metal-textured end cap, combining protective performance and easy disassembly.

It is used to protect the internal core circuit module.

Main Body Shell

Perforated Detection Section

Array-type perforated structure ensures full contact between internal sensing elements and environmental factors in the grain bulk (such as gas, temp and humidity), enabling accurate data collection.

Rechargeable Trapping Lamp

Handle Structure

Conical Insertion Tip

Sharp conical design for quick insertion into the grain bulk and other media, improving the convenience and stability of device deployment.

Specifications

Parameter Category	Specification		
Monitoring Parameters	Grain bulk temperature, grain bulk humidity, CO ₂ concentration in grain bulk		
Temperature Range	-20°C ~ +60°C		
Humidity Range	0%RH ~ 95%RH (non-condensing)		
CO ₂ Range	0 ~ 5000ppm		
Measurement Accuracy	Temperature: ±0.5°C; Humidity: ±3%RH; CO ₂ : ±5%FS	Resolution	Temperature: 0.1°C; Humidity: 0.1%RH; CO ₂ : 1ppm
Power Supply	Built-in lithium battery + low-power charging		
Protection Rating	IP67 (dustproof and moisture-proof, suitable for complex grain bulk environment)		
Material	Food-grade ABS (main body) + stainless steel (handle)		

Data Transmission

Item	Description
Transmission Mode	Adopts Bluetooth Low Energy (BLE) or LoRa wireless communication, adapted to signal-blocking scenarios inside granaries.
Transmission Distance	≥ 50 meters (in open environment).
Data Interaction	Supports pairing with granary environmental monitoring hosts / mobile terminals (e.g. handheld PDA) for real-time upload of monitoring data.
Storage Function	Built-in local storage module, capable of caching ≥7 days of historical data when disconnected, with automatic data retransmission after connection recovery.
Transmission Protocol	Compatible with standard Modbus-RTU protocol.
Management Platform	Data can be connected to the IoT management platform for unified visual data management.