

PT-150-2W

Drone-based Pest Control Turntable System

This UAV control gimbal system is a U-T type two-axis (azimuth + pitch) precision gimbal, comprising primarily a mechanical platform and a servo control system. It is designed to rapidly track and locate targets such as UAVs, providing the system with positional coordinates.



Product Features

- Two-axis U-T type precision structure
- Load capacity up to 150 kg
- Wide azimuth range of $\pm 350^\circ$
- Dual-axis speed range of 0–100°/s
- Tracking accuracy $\leq \pm 10''$
- High-speed stability

Suitable scenarios

Designed for use in the drone pest control industry, this electro-optical tracking and positioning device forms part of a drone detection and countermeasure system, guiding the operation of jamming or strike devices.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Accuracy Performance	Angular position accuracy	$\pm 10''$
	Angular position repeatability	$\leq \pm 5''$
	Tracking/pointing accuracy	$\leq 10''$
	Speed smoothness	2×10^{-3} to 2×10^{-5}
Dynamic Performance	Maximum angular velocity	$100^\circ/\text{s}$
	Maximum angular acceleration	$50^\circ/\text{s}^2$
	Range of motion	Azimuth: $\pm 350^\circ$ Elevation: $\pm 90^\circ$
Mechanical Specifications	Load capacity	150 kg
Environmental Protection	Protection rating	Ip65
	Operating temperature	-20°C to $+55^\circ\text{C}$
Power and Communications	Power supply requirements	24 V DC / 5 A
	Control interface	100 M Ethernet port / RS485 / serial port