

520nm Laser 1080P 30X Zoom

Smart Bird Defense PTZ System



Key Features

- 2MP HD visible-light camera with deep learning algorithms for precise bird flock identification;
- Using a high-power 520nm green single-line laser (1500mW) and strobe lamp (2000 lx);
- Horizontal 360° continuous rotation + vertical -90° to +90°tilt for sweeping large farms, airports, or power grids;
- Adjustable parameters: laser sweep speed/angle, PTZ movement range, operation schedules;
- Remote management via web or NVR for real-time monitoring;
- IP67-rated against dust/water; lightning/surge/EMI protection; self-cleaning glass window;
- Stores bird activity images locally or on cloud servers for behavior analysis.

Product features

Equipped with a specific-wavelength laser designed exclusively for bird deterrence, this intelligent pan-tilt platform delivers long-range effectiveness and enables real-time remote control via an advanced management system. It operates noise-free and pollution-free, ensuring zero interference with nearby equipment or workflows. Application: Airfields\Power Transmission Lines\ElectricalSubstations\Croplands\Orchards\Ranching Facilities\PV Power Plants\Logistics Warehouses.

Technical parameters

Model	PV960BDGF203552
Camera function	
Image sensor	1/2.8" Progressive Scan CMOS
Effective Pixels	2MP
Minimum Illumination	Color: 0.005 Lux @(F1.67, AGC ON); B&W: 0.01 Lux @(F1.67, AGC ON)
Main stream	50Hz: 25fps (1920×1080, 1280×960, 1280×720); 60Hz: 30fps (1920×1080, 1280×960, 1280×720)
Focal length	5.1-153mm, 30x optical zoom; 16x digital zoom
Aperture	F1.67-F3.67
Horizontal field of view	62.26° - 2.39° (wide - tele)
Day/Night Switch	Auto ICR cut filter
Wavelengththe lasers	
Wavelength	520±1nm

Optical Output Power	≥1500mW
Laser type	Linear Line Pattern
Strobe light	
Beam form	strobe
Laser color	Green/White/Blue Available
Brightness	≤2000lx
Pan &Tilt	
Rotation range	Horizontal: 360° continuous, vertical: -90 to +90°
Rotation speed	Horizontal: 0.1~30°/S, Vertical: 0.1~30°/S
Preset position	255
3D positioning	Support frame enlargement, target locking field of view center function
Auto Cruise	Support focal length and head speed matching
Power failure memory	Support power-off state memory function, automatically return to the Pan&Tilt and lens state before power-off after power on
Watch function	On/Off, preset point/cruise scan can be called automatically after staying idle for a specified time (including the idle state entered after power-up)
Remote Upgrade	Support both movement and Pan&Tilt remote upgrade (related to movement)
Smart Wiper	Remote intelligent control (optional)
Fan/Heating	Real-time temperature detection, pure physical detection
Waterproof respirator	Built-in 2 waterproof respirators to reduce fogging and condensation
Communication Baud Rate	2400/4800/9600/19200bps
Smart	
Automatic Bird Flock Recognition	Identifies avian targets with real-time motion detection, captures optimal images of flying birds, and outputs high-definition target snapshots.
Intelligent Algorithm	Embedded deep learning engine trained on massive annotated datasets (images/videos), increasing target recognition rate by up to 95% under complex backgrounds
Network	
Network Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, IPv6
Access Protocol	ONVIF(PROFILE S,PROFILE G)
Storage Function	Support micro SD / SDHC / SDXC card (256g) offline local storage, NAS (NFS, SMB / CIFS support)
Interface	
Ethernet Port	RJ4510/100Base-T(IEEE 802.3)
External RS-485 Interface	One line(ISO/IEC 8482:1993)
Power supply	One line
Grounding Terminal	One line(IEC 60364-5-54)
General	
Power supply	DC24V/4.0A
Power consumption	≥40W (Laser start)
Working Temperature	-30℃～60℃
Working humidity	0～95%RH
EMC level	IP67, Power 4000V, Surge and Spike Protection
Dimensions	L160mm×W328mm×H236mm
Product weight	5kg

Dimension

