

Photoelectric Detection System

UAD-EOC-TS



Key Features



- Tracking turntable: provides high precision Angle positioning and fast response, ensuring that the photoelectric system can quickly and accurately align and track the target.
- Photoelectric cabin: Integrated uncooled infrared focal plane detector, high-definition visible light camera and image processing board, multi-sensor collaboration, improve the accuracy and reliability of target detection, recognition and tracking.
- Target positioning: The photoelectric tracking system completes the initial alignment of the target according to the target location information provided by the external search system. This step is the starting point of the system's work, ensuring the direction and effectiveness of subsequent operations.
- Target search: Target search is performed in the vicinity of the initial alignment area. During the search process, the system can use automatic identification technology or manual instructions of the operator to confirm the suspicious target, which improves the search efficiency and accuracy.

Specifications

Project	performance
Infrared thermal imager	
Infrared camera types	Vanadium oxide uncooled infrared focal plane detector
Image size	640×512
Response band	8 ~ 14µm
Noise equivalent temperature difference	≤40mK@25°C,f#1.0
Detector frame rate	50Hz
Minimum object distance	30m
Focusing system	Manual operation
Non-uniform correction	Auto
Visible light camera	
Visible light camera type	1/2.8 inch Exmor CMOS, 2 million pixels
Image size	1920×1280
Lens	30X photoelectric zoom; f=4.3mm(wide end) to 129.0mm(far end); F=1.6 to 4.7
Digital zoom	12X (360 times after photoelectric zoom)
Viewing Angle (horizontal)	63.7°(wide end) to 2.3°(far end)
Minimum object distance	10mm(wide end) to 1200mm(far end)
Minimum illumination (50%)	High sensitivity mode: 0.35lx (ICR off); 0.013 lx (ICR on); Normal mode: 1.4lx (ICR off); 0.05 lx (ICR on).
White balance	Automatic, automatic tracking, indoor, outdoor, outdoor automatic, sodium vapor lamp fixed/automatic, one click, manual
gain	Automatic/manual, maximum gain limit
Focusing system	Automatic (Sensitivity: normal, low), one-click autofocus, manual, infinity, interval autofocus, zoom trigger autofocus, focus compensation when ICR mode is turned on
De-fog mode	Yes (on/off)
Color enhancement	Yes (on/off)

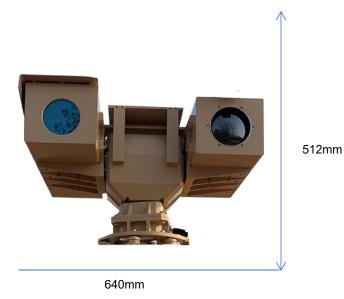


Specifications

Image processing	
Search and automatic tracking distance	With automatic tracking and recognition ability, in good weather conditions, the maximum tracking distance of 1.2km (" Spirit 3 "UAV,);
Maximum tracking speed	1.5 FOV/s
Tracking accuracy (static)	±1pixel
Occlusion resistant memory tracking time	≥3s
Servo performance	
Tracking range	Azimuth: 360°; Pitch: -10°~45°
Tracking angular velocity	≥60°/s
Tracking angular acceleration	≥30°/s2



Equipment size



*Please refer to the actual product. The equipment provides different customized styles.



Equipment size

