

Illuminate the Path for AI Recognition, Fast and Accurate

Specialized Long -Distance LEP
Auxiliary Lighting for Drones, FA-1X1 IR

Empower your drone's AI to identify potential threats, even in the weakest light, making your AI image identification unhindered — Complete tasks that require AI to accurately identify at any time



FA-1X1 IR



323g

Features

Enhance night image quality, minimize false alarms, and enable real-time perception

1 Reduce AI Processing Load

High-quality image input minimizes AI pre-processing and save power.

2 Boost Recognition Accuracy

LEP lighting enhances night contrast, significantly improving AI's success in identifying personnel, vehicles, and equipment, while reducing false positives.

3 Shorten reaction latency

High-speed synchronized illumination and focused lighting enable AI to perceive the tactical environment faster and from greater distances.

Night target scene comparison

- **LED Floodlight** : Overexposure at close range, unclear at far distance
- **LEP Auxiliary Lighting** : Uniform high contrast, clear details

Note : 1. Applicable to an illumination distance of 300-600 meters ;

2. Illumination distance is measured based on the distance measurement function in Google Maps.

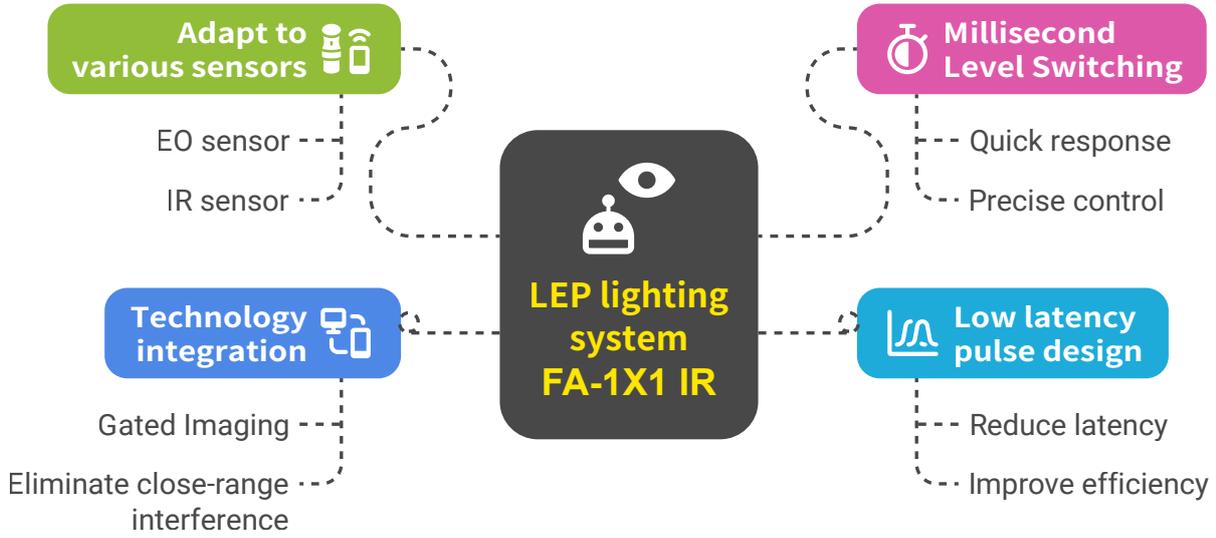


▲ Low-light environment



▲ LEP Auxiliary Lighting

Function Optimizing Image Recognition identification for Drone AI

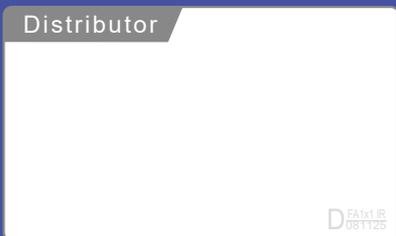


Applicable scenarios

Tactical Reconnaissance | Border Patrol | Night Search & Rescue
 Disaster Site Reconstruction | Illegal Activity Monitoring | Automated Target Tracking

X-Loupe “Long Distance LEP Auxiliary Lighting FA-1x1” Specification	
Power Output (Electric, watt)	Max 10w
Optical / Electric Conversion %	Max 40%
LEP Cells	1 cell
Lens Diameter	25 mm
Beam Projection Angle (Degree)	4.6°
Cooling	Active Air
Dimension	120 mm (L) x 68 mm(H) x 79 mm(W)
Weight	323 g
Storage Temperature	-40~+85°C
Operating Temperature	0~55°C
DC Input Range	Li-ion 18650 (Batteries not included / purchased separately. We recommend 18650 lithium batteries with a protective plate.)
Runtime	2.5 hrs

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