

ClairSaf CatEye

Solar-powered Warning Light for the Highway Barrier



The ClairSaf-CatEye Solar Synchronized Warning Light is a flashing warning device with synchronized flashing capability. It operates entirely on solar power, eliminating the need for external electrical connections. This product is primarily installed at high-risk road segments such as sharp curves, steep slopes, intersections, and areas prone to heavy rain or fog. Its purpose is to alert drivers to potential hazards, thereby enhancing road safety and reducing the likelihood of traffic accidents.

The light-emitting module uses high-brightness, long-lifespan LED, while the frame is lined with reflective tape. The combination of active illumination and passive reflection ensures maximum visibility and warning effectiveness. The controller is built with industrial-grade, high-performance components and utilizes wireless communication for synchronized operation, offering stable and reliable performance.

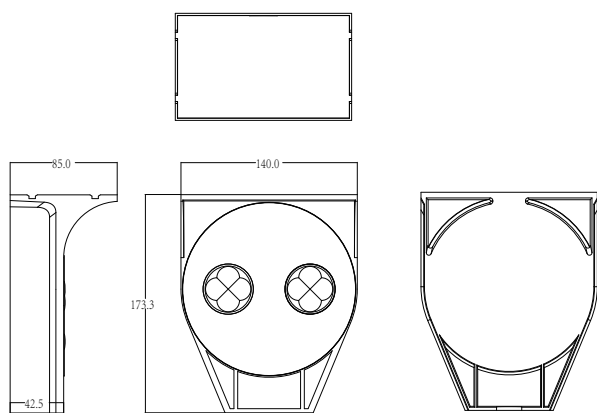
■ Key Features

- **Easy Installation:** Can be mounted using a sleeve base or U-shaped bracket for quick and secure installation.
- **Synchronized Flashing:** Wireless synchronization with fast response less than 50ms.
- **Automatic Brightness Adjustment:** Light intensity adjusts automatically based on ambient outdoor lighting, optimizing energy efficiency.
- **Highly Effective Warning:** Front panel features reflective tape, combining active illumination with passive reflection for enhanced visibility.
- **High Brightness:** Equipped with high-brightness, impact-resistant LED chips.
- **Stable Performance:** Built-in protection circuits for overcharge, over-discharge, and surge protection ensure reliable operation.
- **Durable and Rugged:** Made with industrial-grade plastic that resists aging and corrosion. The solar panel is formed using special high-molecular materials, making it shatter-resistant and long-lasting.

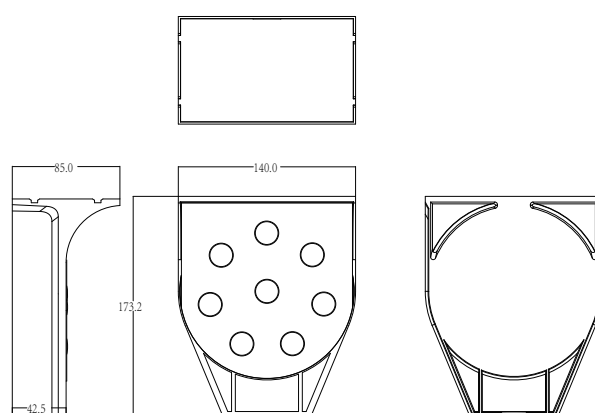
■ Specification

	ClairSaf-CatEye
Power Supply Voltage	DC 3.7V
Rated Power	≤0.5W
Temperature & Humidity	-20 to +65 ; 10%-95% RH (non-condensing)
Service Life	≥80,000 hours
IP Rate	IP54
Illuminated Area Size	138*138 mm
Number of LEDs	8 LEDs
LED Wavelengths	Red: 615-630 nm Amber/Yellow: 590-595 nm Blue: 465-472 nm
LED Brightness (Typical per LED)	Red: 4800-6500 mcd Yellow: 4500-6500 mcd White: 9500-10500 mcd
LED Viewing Angle	≥30°
Visible Range	≥300 meters
Operating Modes	24-hour synchronized flashing Light-controlled synchronized flashing
Flashing Frequency	60 flashes/minute (customizable per client requirements)
Solar Panel	Matte PET monocrystalline solar panel, 1.75W / 5V
Protection Technology	Moisture-proof, dust-proof, anti-static, with over-current, short-circuit, over-voltage, and under-voltage protection. Moisture-proof, dust-proof, anti-static, with over-current, short-circuit, over-voltage, and under-voltage protection.
Battery	18650 Lithium-ion battery, 3.7V, 2600mAh
Communication Method	2.4G wireless
Net Weight	380g
Dimension	140*173.2*85mm
Material & Surface Treatment	High-quality engineering plastic (PC)

■ Mechanical Drawings



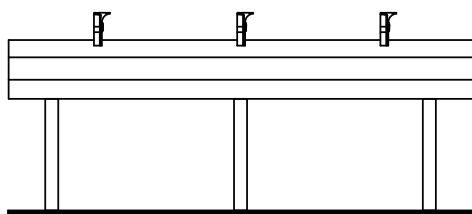
ClairSaf-CatEye-2



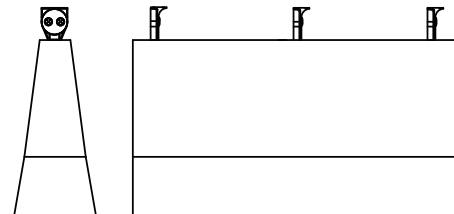
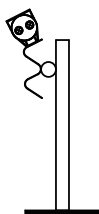
ClairSaf-CatEye-8

■ Hardware Installation

1. Use an M20 screw to pass through the installation hole of the cat-eye warning light and the opening of the corrugated guardrail, then secure the cat-eye warning light and the guardrail together and tighten (for corrugated guardrail installation).
2. Drill holes in the concrete guardrail to install expansion bolts, then fix the cat-eye warning light to the concrete guardrail using the expansion bolts and tighten the screws.
3. After installation, turn on the switch of the cat-eye warning light for normal operation.
4. Note: If in light-control mode, the solar panel must be covered (or at night) for 60 seconds before the light turns on.



Installation on Corrugated Guardrail



Installation on Concrete Guardrail

■ Ordering Information

Model	Description
ClairSaf-CatEye-2	Solar-powered Synchronized Warning Light for the Highway Barrier. 2 eyes with 4 LEDs in each eye
ClairSaf-CatEye-8	Solar-powered Synchronized Warning Light for the Highway Barrier. 8 eyes with 1 LED in each eye

