

12" SOLAR LED FLASHING LIGHT

High-Visibility Autonomous Hazard & Traffic Warning System

Model: SFL-12-10W
Category: Solar Safety Lights
Revision: v2.1 | 2026

PRODUCT DESCRIPTION & OVERVIEW

The **12-Inch Solar LED Flashing Light** is a robust, energy-independent warning signal engineered for enhanced road safety, perimeter hazard marking, and traffic management. Featuring a heavy-duty 10W LED module combined with an 8W monocrystalline solar panel and intelligent energy management, this system offers complete plug-and-play installation without external wiring or grid dependency.

High Visibility

Visible from over 2,500 feet (>760m) under standard ambient conditions.

Extended Autonomy

Operates continuously for 5–7 days following a single full solar charge.

All-Weather Shell

Enclosed in a durable ABS plastic shell designed for harsh outdoor environments.

TECHNICAL SPECIFICATIONS

SPECIFICATION PARAMETER	TECHNICAL DETAILS & VALUES
1. OPTICAL & LIGHTING SPECIFICATIONS	
Light Source	10W High-Intensity LED Cluster
Lens Diameter	12" (approx. 305 mm) Round Lens
Standard Color Range	Amber (Red available on special request)
Visibility Distance	> 2,500 Feet (> 762 Meters)
Flashing Frequency	50 flashes per minute (Customizable upon request)
2. SOLAR POWER & ELECTRICAL SYSTEM	
Solar Charging Panel	12V, 8W Monocrystalline Silicon Panel
Battery Storage	High-Capacity Lithium Battery (12V / 14,000 mAh)
Battery Life Span	3 to 5 Years (Rechargeable Cycle Life)
Operating Autonomy	5 to 7 consecutive days after one full charge
3. OPERATIONAL MODES & MECHANICAL	
Working Modes	24 Hours / Day • Flashing or Constant Lighting (Selectable) • Timer Control Option available
Cover Material	High-Impact ABS Plastic Shell
Physical Dimensions	12" Diameter Round Signal Module
Shipping Weight	6.9 kg (approx. 15.2 lbs)

SPECIFICATION PARAMETER	TECHNICAL DETAILS & VALUES
Warranty	18 Months Manufacturer Limited Warranty

Key Applications

- **Public Roadways & Streets:** Caution signals for curves, intersections, and pedestrian zones.
- **School Zones:** Speed reduction awareness and crosswalk safety alerts.
- **Parking Structures & Depots:** Entrance warning indicators and speed bump alerts.
- **Work Zones & Construction:** Temporary hazard delineation and roadworks safety.

Installation & Operation Advantages

- **Zero Utility Cost:** 100% solar powered; operates anywhere with adequate sunlight exposure.
- **Rapid Deployment:** Simple installation with no trenching, cabling, or electrical grid hookup required.
- **Low Maintenance:** Long-life lithium battery and weather-resistant ABS casing ensure multi-year maintenance-free service.