

# Solar Powered Street Light with Lead-Acid Battery

This street light is powered by a 40W solar panel and a 12V/55AH lead-acid battery. The 12V/11W LED provides 650Lm of light with color temperature options of 2700K and 6400K.



## Overview

### Solar Powered Street Lighting Solution

This high-efficiency solar street light is designed for reliable outdoor illumination, featuring a 40W solar panel and a robust 12V/55AH maintenance-free lead-acid battery. Engineered for durability, it includes advanced overcharge and over-discharge protection with integrated light control for optimal energy management. It delivers consistent performance across varying weather conditions, offering up to 12 hours of nightly illumination and a backup capacity for over five consecutive rainy days.

## Performance

### Illumination Performance

**11 W**

Power Consumption

**650 Lm**

Luminous Flux

### Color Temperature Options

2700K, 6400K

## Power and Battery

### Battery and Control System

- 12V/55AH maintenance-free lead-acid battery
- Solar panel output: 40W
- Dedicated solar controller with overcharge protection
- Integrated over-discharge protection
- Light control functionality

## Environmental Durability

### Environmental Specifications

Metric	Value
Operating Temperature	-40°C to 50°C
Wind Resistance	Up to 150 km/h
Autonomy	5+ rainy days

## Design and Construction

### Construction Materials

Hot-dip galvanized steel with a protective powder-coated surface finish.