KIRITO



ST43 44 G2.0

All-In-One Solar Street Light with Charging Port

The ST43 44 G2.0 features a compact design. Equipped with a PIR sensor and remote control for maximum energy efficiency. And it is equipped with a charging port for convenient regular maintenance, preventing deep discharge and extending battery life.

- 10W-60W
- Up to 200lm/W
- IP66
- 0°C to + 50°C
- PWM
- MPPT
- LifePO4
- Mono-crystalline Silicon Panel



Energy Development Trends

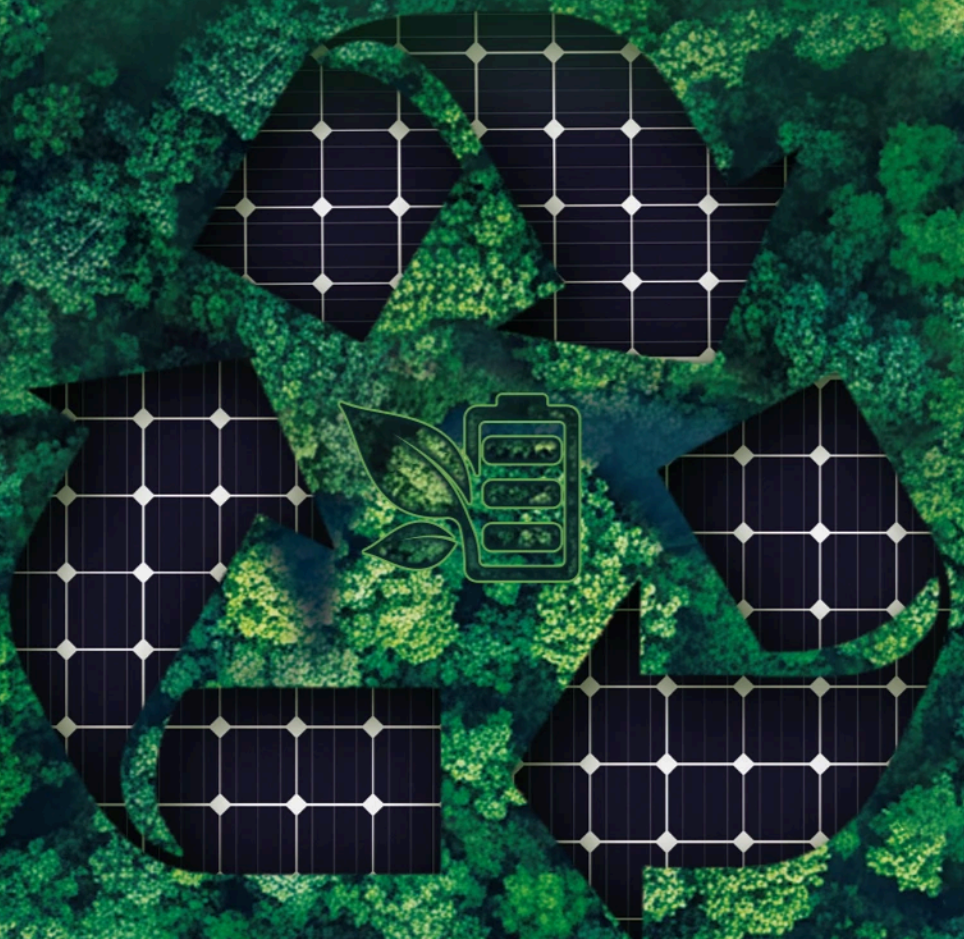
Leveraging advanced PV technology and efficient energy storage, solar lighting maximizes renewable energy utilization, reduces grid dependency, and aligns with distributed energy development under current policies. Driven by dual-carbon goals, solar lighting with zero operational emissions and eco-friendly materials fully aligns with the global low-carbon transition.

Cost Efficiency Advantages

Technology upgrades and mass production drive cost reduction. Cable-free, low-maintenance design significantly reduces upfront investment and long-term operational costs. Shorter ROI period enhances global market competitiveness.

Market Demand Upgrade

Market shifting from "basic lighting" to "smart, efficient, long-life lighting" Medium-small power integrated products become the top choice for rural roads, industrial parks, and parking lots due to easy installation and high cost-performance ratio.



Compact Design

Featuring a streamlined, all-in-one design, it integrates a solar panel, LED light source, LiFePO4 battery, smart controller, and PIR motion sensor. The full product line covers a power range from 10W to 60W.

solar panel

LED light source

LifePO4

PWM/MPPT

PIR

10-60W



Charging Port Solution

Extend Battery Life

Easily perform regular charging for inventory or idle lights to prevent battery damage from power depletion.

Ensure Reliable Operation

During continuous rainy weather, connect an external power source to quickly recharge the battery and keep the lights running.

Indicator Light

● Charging (Red Light)

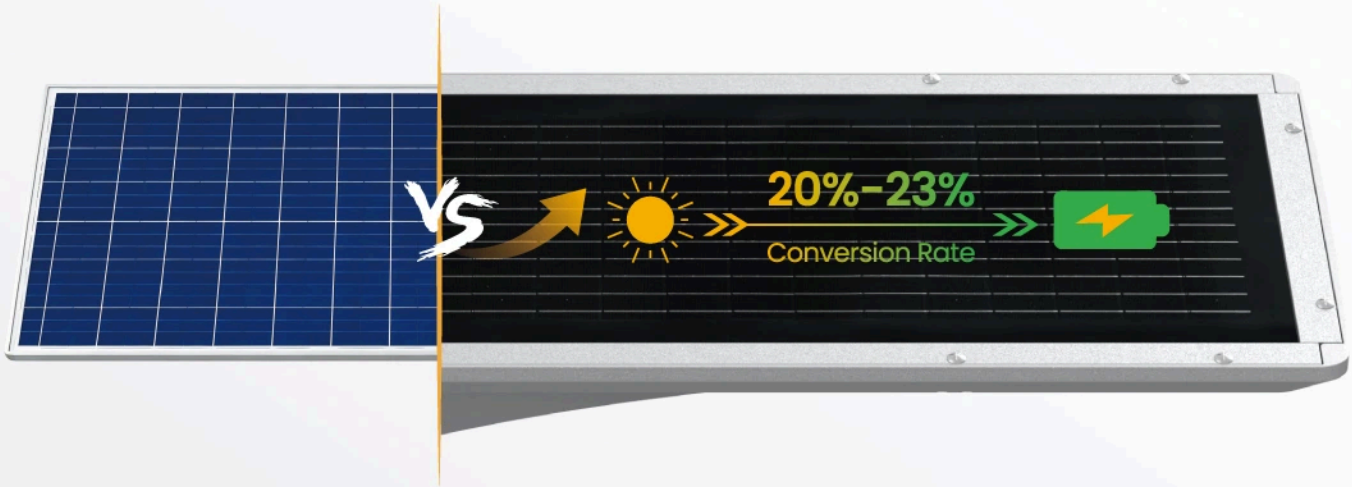
● Fully Charged (Green Light)

Mono-crystalline Solar Panel

Features a high-efficiency mono-crystalline silicon solar panel with a photoelectric conversion rate of up to 20%–23%, (3%-5% higher than conventional poly panels). Exceptionally resistant to UV, high/low temperatures, and salt spray corrosion.

Conventional poly panels

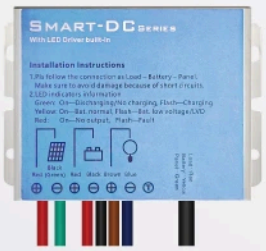
Mono-crystalline silicon solar panel



MPPT & PWM Intelligent Grading

ST43 Series (10W-30W):

Integrated with a precise PWM charge controller for optimal cost-effectiveness and steady efficiency.



ST44 Series (40W-60W):

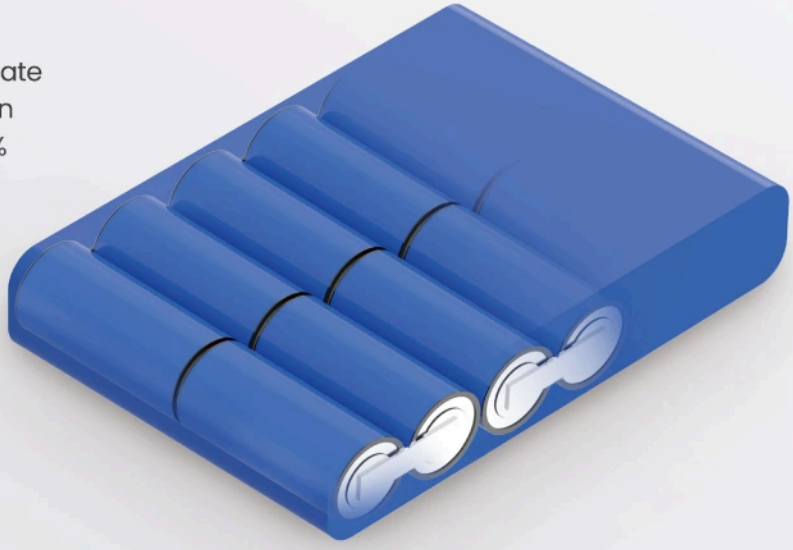
Equipped with an advanced MPPT charge controller to maximize solar tracking efficiency and boost energy yield in high-power applications.



LiFePO4 Battery

Equipped with top-grade Lithium Iron Phosphate (LiFePO4) batteries, providing superior lifespan and safety. It delivers over 2,000 cycles at 80% Depth of Discharge (D.O.D), ensuring long-lasting performance.

>2000 Cycles





Key Features

01 Up to 200 lm/W high luminous efficacy.

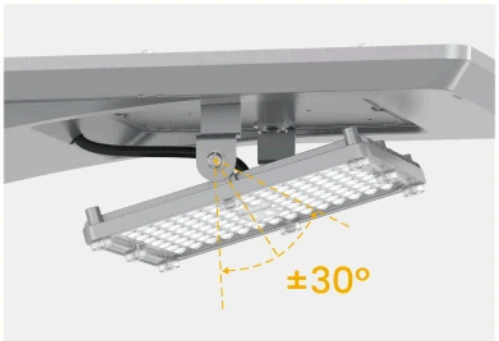


02 IP66 & IK08 protection for all-weather durability.



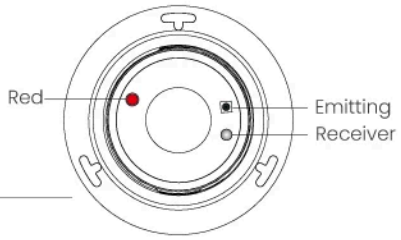


03 ±30° adjustable angle module optional.



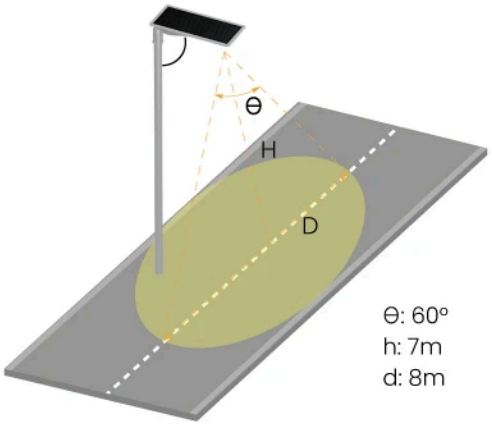
04 Built-in microwave sensor and timer dimming for smart control.





Status (Red LED)	Function
Slow flash(2.5/2.5s)	Short circuit or Over current protection
On	The output power is 0.
Slow flash(0.2s/5s)	Open circuit or Hardware protection
Fast flash(0.1s/0.1s)	Short circuit or Over current protection
Flash(0.5s/0.5s)	Over temperature

Sensing distance



05 ST43 offers 4 mounting options, ST44 offers 2 mounting options, can suitable for a wide range of applications.

ST43



60mm / 76mm post-top mounting



60mm / 76mm side-entry mounting



Pole Clamp Bracket Mount



Wall Mount

ST44



Post-top mounting



Side-entry mounting

06 Multiple beam angles available to fit different road and area lighting requirements.



Type II Medium (R10801)
Suitable for walk paths and small roads.



Type III Short (R10803)
Ideal for residential streets and parking lots.



Type VS (R10805)
Perfect for area lighting like squares and parks.

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ADDITIONAL PRODUCT SPECIFICATIONS

Series Code	ST43 G2.0
Power	10W, 20W, 30W, 40W, 50W, 60W
Efficacy	200lm/W
CCT	3000K, 4000K, 5000K
CRI(Ra)	80, 70
Class Electrical Equipment	Class III
IP Rating	IP66
IK Rating	IK08
Mounting Option	Post Top, Side Entry, Wall Mounting, Pole clamp bracket
Warranty	Battery: 3 Years, Other accessories: 5 Years
Operating Temperature	0°C to + 50°C

The ST43 and ST44 G2.0 series delivers up to 200 lm/W using monocrystalline panels and LiFePO4 batteries, available with PWM (ST43, 10-30W) or MPPT (ST44, 40-60W) controllers. To simplify upkeep, each unit features an integrated charging port for routine maintenance, effectively preventing deep discharge and extending the overall service life of the battery. For maximum adaptability, an optional adjustable module allows for 30° angling to fine-tune light coverage. Built-in microwave sensing and scheduled timer dimming ensure intelligent energy management and dependable performance night after night.

PRODUCT VIEWS



VIEW 1



VIEW 2



VIEW 3



VIEW 4

PRODUCT VIEWS



VIEW 5