

LEVEL 1 B-BBEE



PRODUCT  
CATALOGUE

# POWERED FUTURES



## SOLAR STREET LIGHTS

**365 DAYS LIGHTING, ALL-WEATHER LIGHTING, SOLAR  
ENERGY ROAD PROJECTS FIRST CHOICE.**

Accredited By:



# OUR VISION & MISSION



## Vision

At ON Energy Solutions, we aspire to be pioneers in supplying innovative and technological products tailored to meet renewable, safe, and sustainable energy.

## Mission

Our mission is to supply meticulously crafted Renewable and Smart Energy Solutions to boost energy efficiency, champion sustainability, providing a brilliant and effective alternative to tackle 21st-century energy challenges and beyond and elevate the safety and well-being of our communities.

As we progress, insights from customers, technological breakthroughs, and our unwavering dedication to excellence will shape our array of offerings.

We envision forging a sustainable energy future for South Africa that embraces inclusivity, caters to all stakeholders, and carefully considers the diverse economic dynamics within our society and communities.

We prioritize the certification, accreditation, and testing of our Renewable and Smart Energy Solutions products sourced from reputable manufacturers. These partners adhere to stringent quality standards, providing the necessary certifications and test reports to ensure compliance with South African regulations.



# SOLAR STREET LIGHTS

HIGH-SPEED CHARGING  
OF MONOCRYSTALLINE  
SILICON SOLAR PANELS



INTELLIGENT SUN  
CHASING LIGHT



4G CAMERA  
MONITORING LIGHT



ADJUSTABLE  
MODULES LIGHT



DOUBLE PANEL -  
HIGH POWER MODEL  
LIGHT



STANDARD MODEL  
LIGHT (4G CAMERA  
OPTIONAL)



ECONOMIC MODEL  
LIGHT (NOT 4G  
CAMERA OPTIONAL)



ENERGY SOLUTIONS

POWERED FUTURES

# INTELLIGENT SUN CHASING SOLAR STREET LIGHT

Tracking rotation angle up to 340 degrees  
The service life of solar panel can reach 20-25 years.

Equipped with permanent magnet DC gearmotor, the service life can reach 20 years.



Extra slim Lamp  
Shell design



Support 32-64  
GB high-speed storage card



Motion detection  
alarm push



20-30m Radar motion  
sensor energy saving model



4G/WiFi Monitor camera



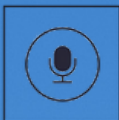
High capacity lithium  
iron phosphate battery



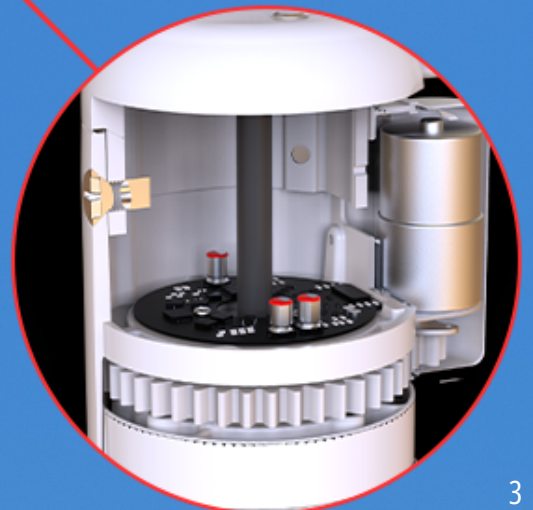
mppt control system



APP/iPAD/PC remote  
monitoring unlimited distance



Voice intercom  
monitor recording





# 4 PRODUCT SPECIFICATIONS AVAILABLE

Power: 100W/150W/200W/250W



## PRODUCT PARAMETERS

model YTH-KM2A-2	model YTH-KM2A-3	model YTH-KM2A-4	model YTH-KM2A-5
Highlight 2835 wafer 240pcs	Highlight 2835 wafer 160 pcs	Highlight 2835 wafer 320pcs	Highlight 2835 wafer 400Pcs
total luminous flux 4462lm	total luminous flux 6085lm	total luminous flux 7696lm	total luminous flux 9355lm
installation height 3-5m	installation height 5-7m	installation height 7-9m	installation height 8-10m
battery capacity 12.8V / 308WH	battery capacity 12.8V / 384WH	battery capacity 12.8V / 410WH	battery capacity 12.8V / 461WH
PV panel power 18V / 40W	PV panel power 18V / 50W	PV panel power 18V / 60W	PV panel power 18V / 70W
solar panel size 720*350*23mm	solar panel size 870*350*23mm	solar panel size 1040*350*23mm	solar panel size 1210*350*23mm
Lamp body weight 12kg	Lamp body weight 14kg	Lamp body weight 16kg	Lamp body weight 18KG
20wFull battery life about 16 hours	30wFull battery life about 12.8 hours	40wFull battery life about 10.2 hours	50wFull battery life about 9.3 hours
Lamp body size 790*420*230mm	Lamp body size 940*420*230mm	Lamp body size 1110*420*230mm	Lamp body size 1280*420*230mm

# HIGH-END CONFIGURATION

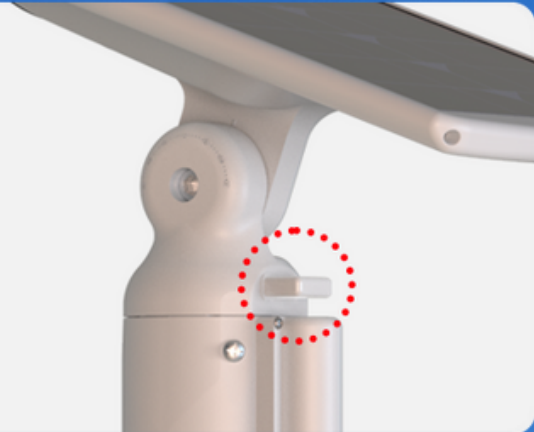


## SUPER BRIGHT LED CHIP

high brightness white light  
Lighting control + radar sensor  
The photoelectric conversion efficiency of monocrystalline panels is generally around 24%. The loss is small, and the rainy days can last for 5-7 days.

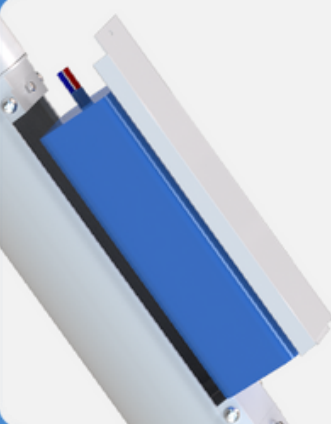
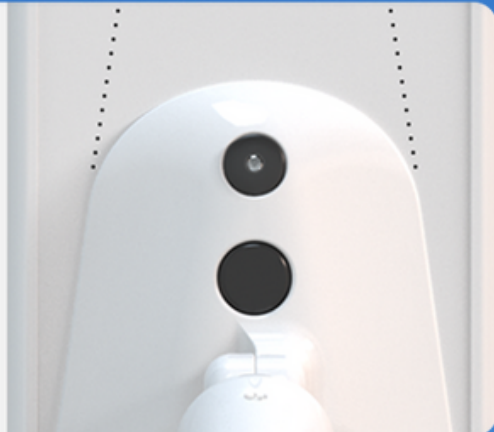
## 4G/WIRELESS NETWORK MODULE

The communication module can provide  
More stable transmission network,  
Higher transmission bandwidth,  
Safer Transmission Technology



## RADAR SENSOR DIMMING

When no one is moving, the brightness is 50%  
100% brightness when someone is moving  
Effectively save battery capacity  
Greatly improved battery life



## LARGE CAPACITY BATTERY LONG BATTERY LIFE

Ternary lithium and iron phosphate batteries are optional  
Built-in short circuit, overcharge, over discharge protection module  
Effectively guarantee the stability and life of the battery.



## EQUIPPED WITH MPPT CHARGING TECHNOLOGY

The overall power generation efficiency is about 40% higher than that of traditional solar lamps.





# RECEIVES SUNLIGHT DURING THE DAY AND AUTOMATICALLY LIGHTS ON AT NIGHT

During the day, light is stored and light energy is converted into electricity. At night the intelligent light sensor control automatically lights up.





# MULTIPLE BEAM ANGLES ADJUSTMENT

The lamp head is equipped with a precision scale. The angle of the lamp head can be adjusted arbitrarily.



RULER VISIBLE



## HIGH SPEED CHARGING

Monocrystalline silicon photovoltaic panel

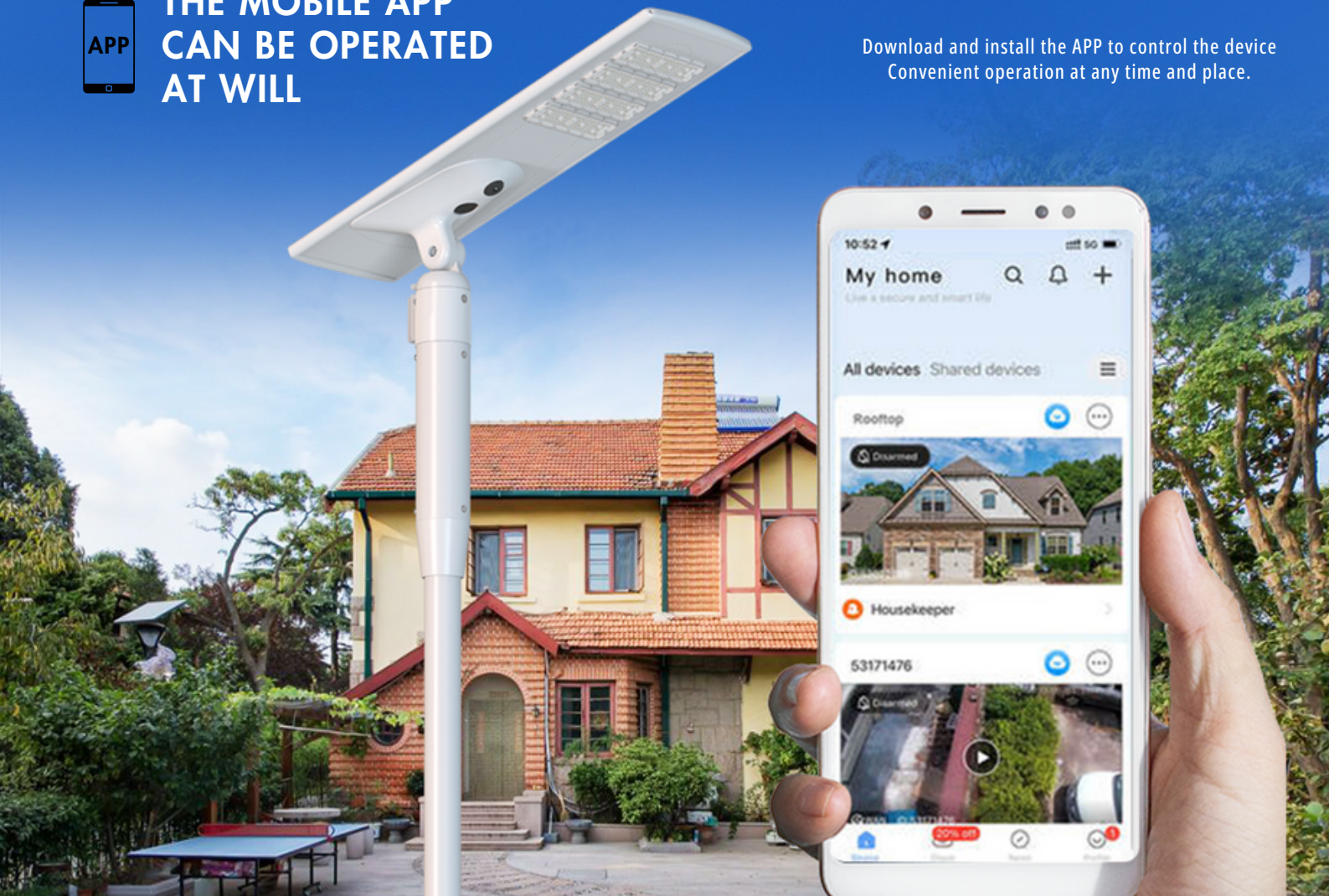
Using high-efficiency monocrystalline silicon solar panels, the solar power generation efficiency reaches 23%. 25-30 years lifespan and warranty.





## THE MOBILE APP CAN BE OPERATED AT WILL

Download and install the APP to control the device  
Convenient operation at any time and place.



## 4G REMOTE MONITORING

1080P high-definition pixels, when going out, multiple terminals can easily view through remote, support real-time viewing of multiple terminals such as mobile and PC, and multiple accounts can be viewed at the same time.





## VOICE INTERCOM MONITORING RECORDING

Two-way voice, real-time conversation, video intercom, the conversation is very clear. Built-in fidelity sensor, monitoring function. With recording and intercom functions, it can make remote calls and restore the real scene.

Outdoor (30-50m)



# MOTION DETECTION, REMOTE ALARM

Comes with WIFI hotspot, mobile remote observation



**1080 HD wireless WIFI camera**



## 4G CAMERA MONITORING LIGHT

Providing Quality Design & Engineering

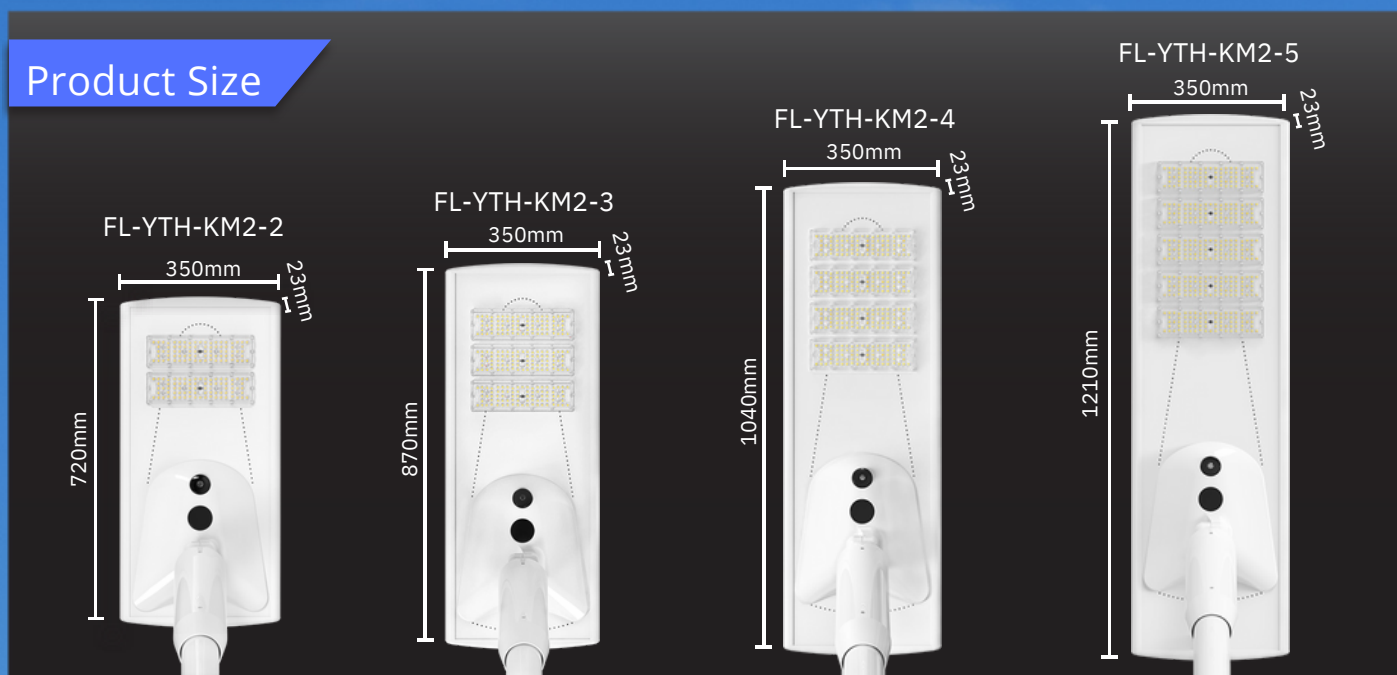


## PARAMETERS OF 4G CAMERA MONITORING LIGHT

Product model	FL-YTH-KM2-2	FL-YTH-KM2-3	FL-YTH-KM2-4	FL-YTH-KM2-5
LED Quantity	160Pcs	240Pcs	320Pcs	400Pcs
Total light	4000-6000lm	6000-8000lm	8000-10000lm	10000-12000lm
Recommended installation height	3-5m	5-7m	7-9m	8-10m
Battery capacity	12.8V/25AH	12.8V/30AH	12.8V/35AH	12.8V/42AH
Solar panels	18V 40W	18V 50W	18V 60W	18V 80W
Product size	720*350*23mm	870*350*23mm	1040*350*23mm	1210*350*23mm
Net weight	12kg	14kg	16kg	18kg
Package Size	790*420*230mm	940*420*230mm	1110*420*230mm	1280*420*230mm
Installation diameter	Φ76/80mm			
Application	Municipal roads / Park squares / Private courtyards / new rural road construction			



### Product Size





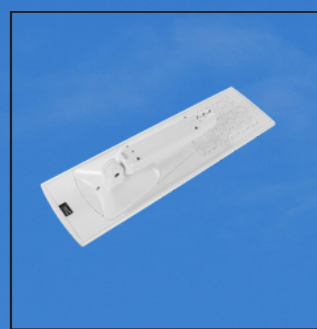
# 4G CAMERA MONITORING LIGHT

Solar powered, 1080P HD pixels



## PRODUCT FEATURES

- All in one Extra slim Lamp Shell design, Aluminum alloy case, Waterproof IP65, 3 years Warranty.
- Philips/Lumileds Chip brand. 200lm/w lumen efficiency, super bright. 75°x140° Beam angle.
- 4G/WIFI monitor camera, 2 million pixels(support 32G/64G/128G RAM).
- High conversion rate Monocrystalline silicon photovoltaic panels.
- 20-30m Radar/ motion sensor energy saving model.
- 1500 cycle High capacity lithium iron phosphate battery. Detachable/Customizable.
- MPPT control system, Charging faster and more stable.
- Turn on at dusk and turn off at dawn automatically.



Extra slim Lamp  
Shell design



4G/WIFI  
Monitor camera



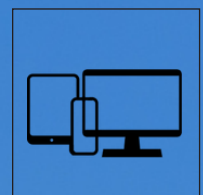
High conversion  
rate Monocrystalline  
silicon photovoltaic  
panels



20-30m Radar  
motion sensor energy  
saving model  
Shell design



Support 32-64G  
High-speed  
storage card



APP / iPad / PC  
Remote  
monitoring  
unlimited distance

# 4G CAMERA MONITORING LIGHT

Real-time Viewing for Camera Monitoring Status



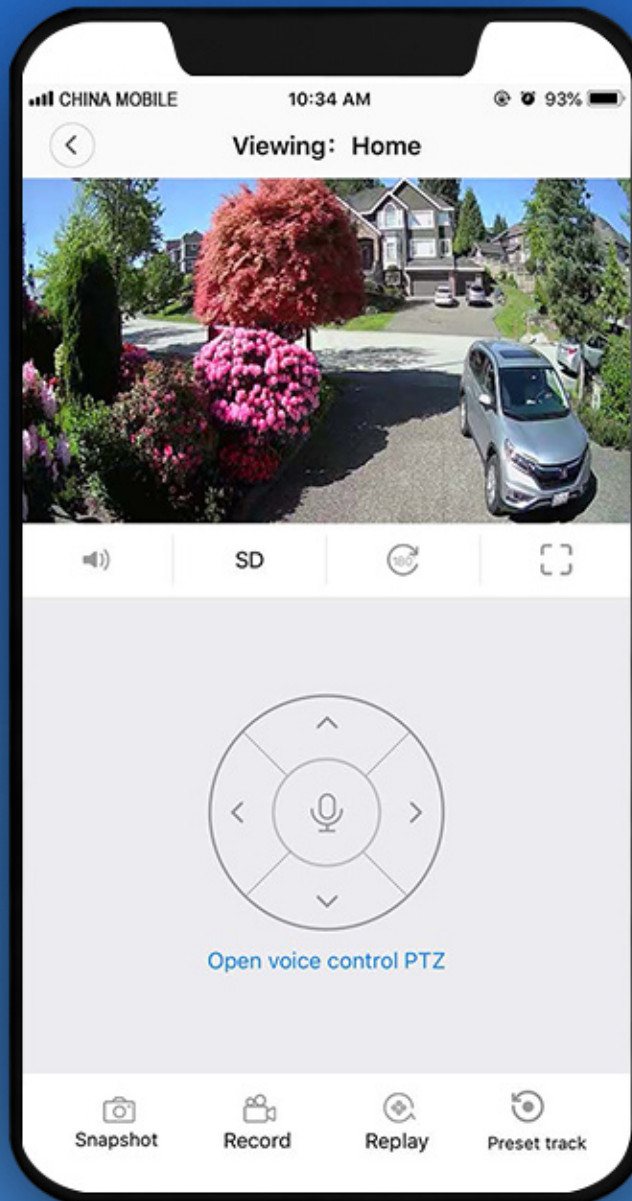
View the farm  
anytime, anywhere



Look at the workshop  
anytime, anywhere



View the parking lot  
anytime, anywhere



Look at the garage  
anytime, anywhere



Nursing home when  
out home



Look at the mall  
anytime, anywhere



# THREE STEPS Easy installation

Easy installation in 3 simple steps, monitoring even in an environment without electricity or network.



1

Install the light  
Adjust the holder angle



2

Download & Install  
The monitor camera APP in  
PC/Smart mobile device



3

Add device  
Real time monitoring

ALL IN ONE SOLAR STREET  
LIGHT 4G CAMERA  
SUPPORT MEMORY CARD  
RECORDING, FREE PLAYBACK.



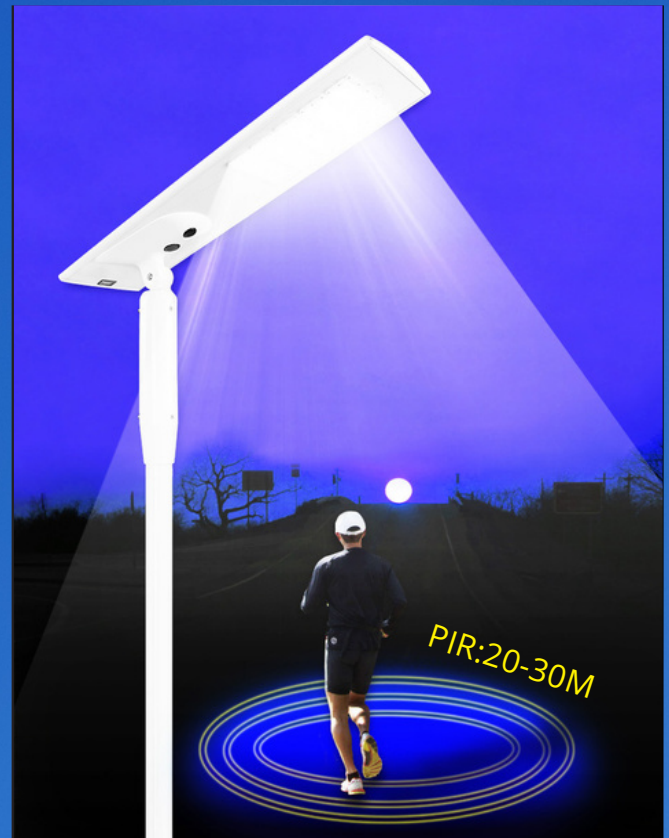


## MOTION SENSOR SOLAR STREET LIGHT

20-30 meters radar sensing range

Radar sensor dimming mode.

Bright when busy, low bright when idle,  
automatically adjust the brightness Energy  
saving mode. Can effectively reduce light  
waste, Increase battery  
life, reduce battery replay times,  
Extend battery life.

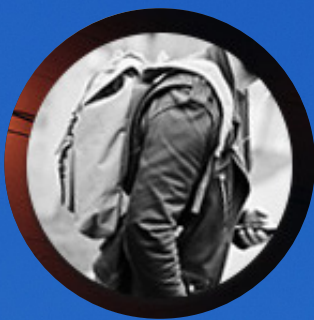


## MOTION DETECTION MOBILE PHONE ALARM

If there is an abnormal change in the screen,  
an alarm message will be pushed to your phone.  
You can remotely view the on-site situation through your mobile phone.  
The alarm function is turned on or off at any time.







Detect human movement.



Two-way voice, real-time communication, and visual intercom communication is clearer.



Built-in fidelity pickup, monitoring comes with recording and intercom functions, and can communicate remotely to restore the real scene.

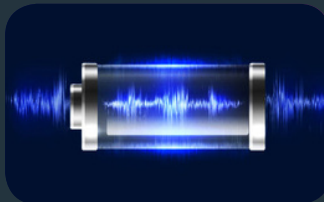
## LARGE CAPACITY IRON PHOSPHATE BATTERY LONG BATTERY LIFE

- Longer life span(2000-5000 cycles).
- Short circuit protection.
- Overcharge protection.
- Over discharge protection.
- Safety and Environmental friendly.
- Wider range of working temperature.

MPPT Solar Charge Controller



Charging faster and more stable.



## MULTIPLE INSTALLATION METHODS

Installation diameter:  $\Phi 76/80\text{mm}$



Wall mounted



Light pole mounted



Hoop mounted



## SCENARIO SHOWS



Highway



Plaza

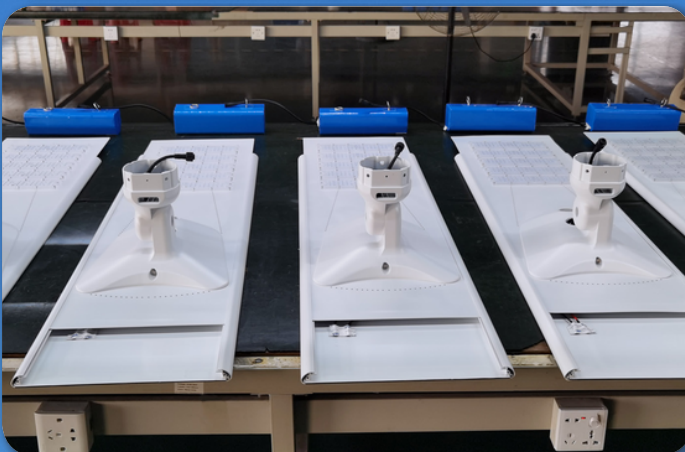
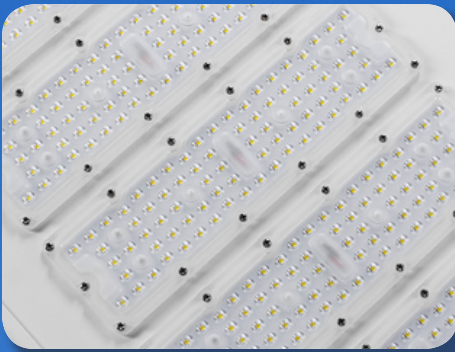


Private courtyards



New city road

## PRODUCT REAL SHOT SHOW

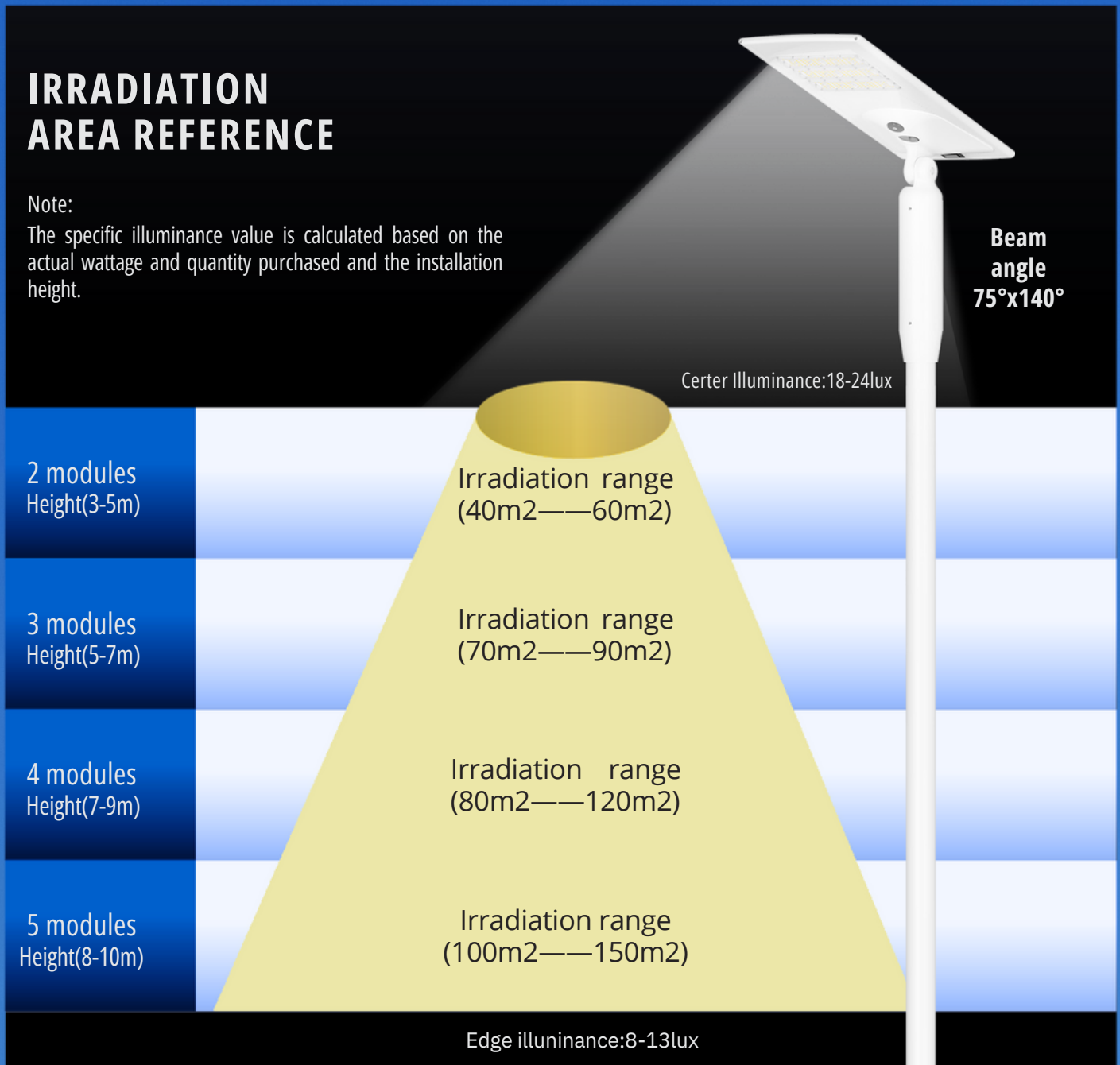




## IRRADIATION AREA REFERENCE

Note:

The specific illuminance value is calculated based on the actual wattage and quantity purchased and the installation height.



## FOLDABLE FOR EASIER TRANSPORTATION

Each Product Has Its Own Independent Packaging.  
Accept Your Special Demands. Let You Save Time and Worries.



## DOUBLE PANEL -HIGH POWER MODEL LIGHT



### Product Features

- Integrated design and source, high capacity LiFePO4 lithium battery, high energy, and long life, light weights, green and environmental protection, do not produce any harmful substances.
- Philips LED chip with high light efficiency which can reach 200LM/W.
- 4G/WIFI monitor camera, 2 million pixels(support 32G/64G/128G RAM).
- All series use MPPT controller which can increase 30%-50% charge efficiency
- Convenient installation and maintenance, no need of cable installation or special light pole, installation and maintenance, convenient and quick replacement.





# ADJUSTABLE MODULES STREET LIGHT



Parameters Of Adjustable Module Light

Product model	FL-YTH-KM2-2	FL-YTH-KM2-3	FL-YTH-KM2-4	FL-YTH-KM2-5
Power	50-60w	60-70w	80-90w	90-100w
LED Quantity Total	160Pcs	240Pcs	320Pcs	400Pcs
Total luminous flux	4000-5000lm	6000-7000lm	8000-9000lm	9000-10000lm
Battery type	Lithium iron phosphate battery			
Recommended installation height	3-5m	5-7m	7-9m	8-10m
Battery capacity	12.8V 231WH	12.8V 308WH	12.8V/359WH	12.8V/410WH
Solar panels	18V 40W	18V 50W	18V 60W	18V 70W
Lens Material	PC 75°x140°	PC 75°x140°	PC 75°x140°	PC 75°x140°
Product size	802*287.6*179mm	947*287.6*179mm	1151*287.6*179mm	
Lamp body weight	12kg	14kg	16kg	18kg
Lamp body size	790*420*230mm	940*420*230mm	1110*420*230mm	1280*420*230mm
Package Size	840*330*240mm	985*330*240mm	1190*330*240mm	
Installation diameter	Φ76/80mm			
Application	Garden courtyard / Park plaza / Municipal highway / New rural countryside road lamp			



## High light efficiency LED lamp beads

2835 lamp beads, the whole light effect can reach 180LM/W  
Anti-sulfide process, more suitable for outdoor lighting



## Angle-adjustable modules

Module angle adjustable

Can be adjusted according to irradiation needs

5 angles adjustable

-20°/-10°/0°/10°/20°



## 4 product specifications available

Power: 100W/150W/200W/250W



## Angle-adjustable modules

Can be adjusted according to needs

Easy adjustment without tools

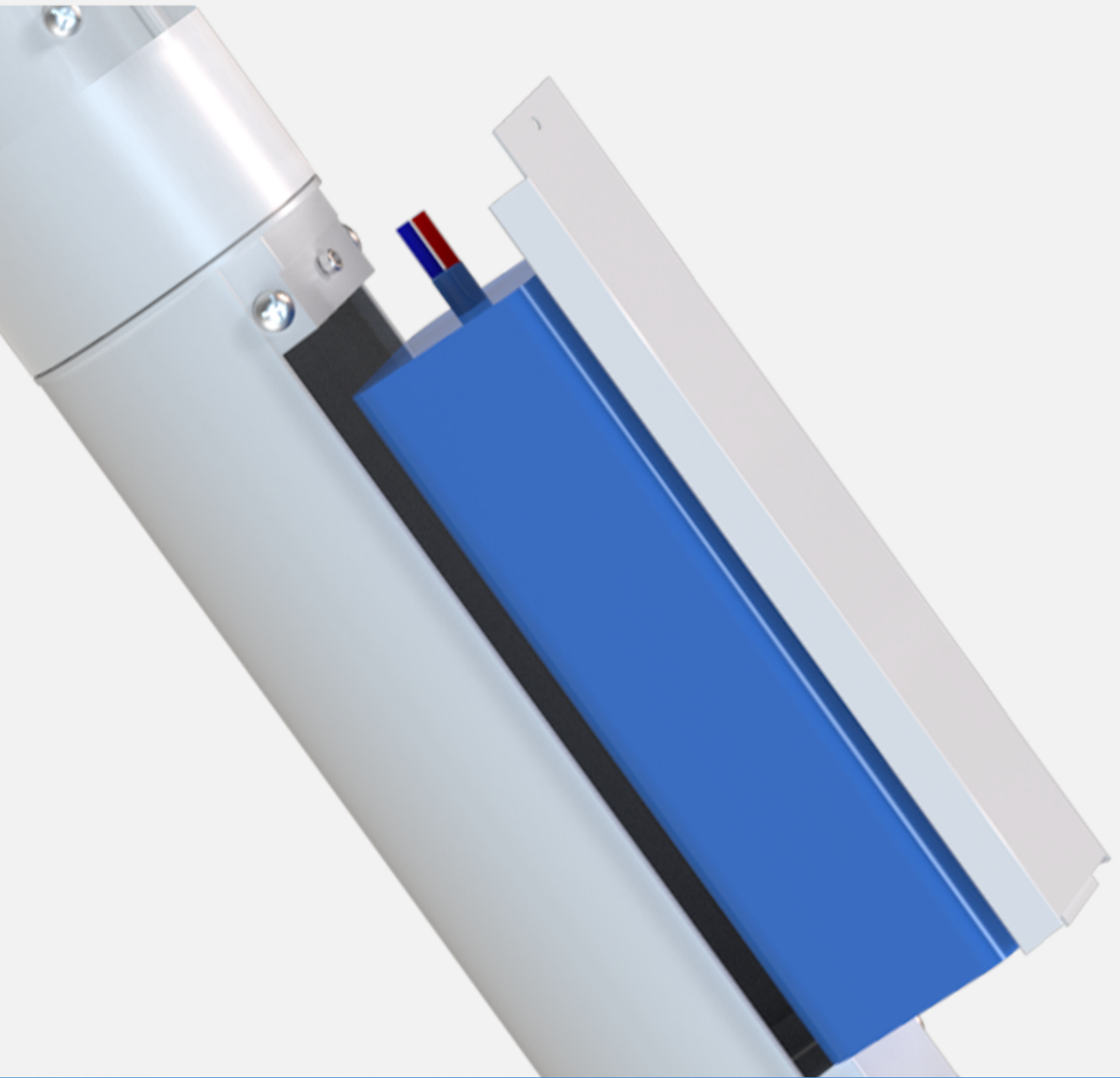






## Long-life battery pack

High-performance ternary lithium battery,  
A1 lithium iron phosphate battery pack,

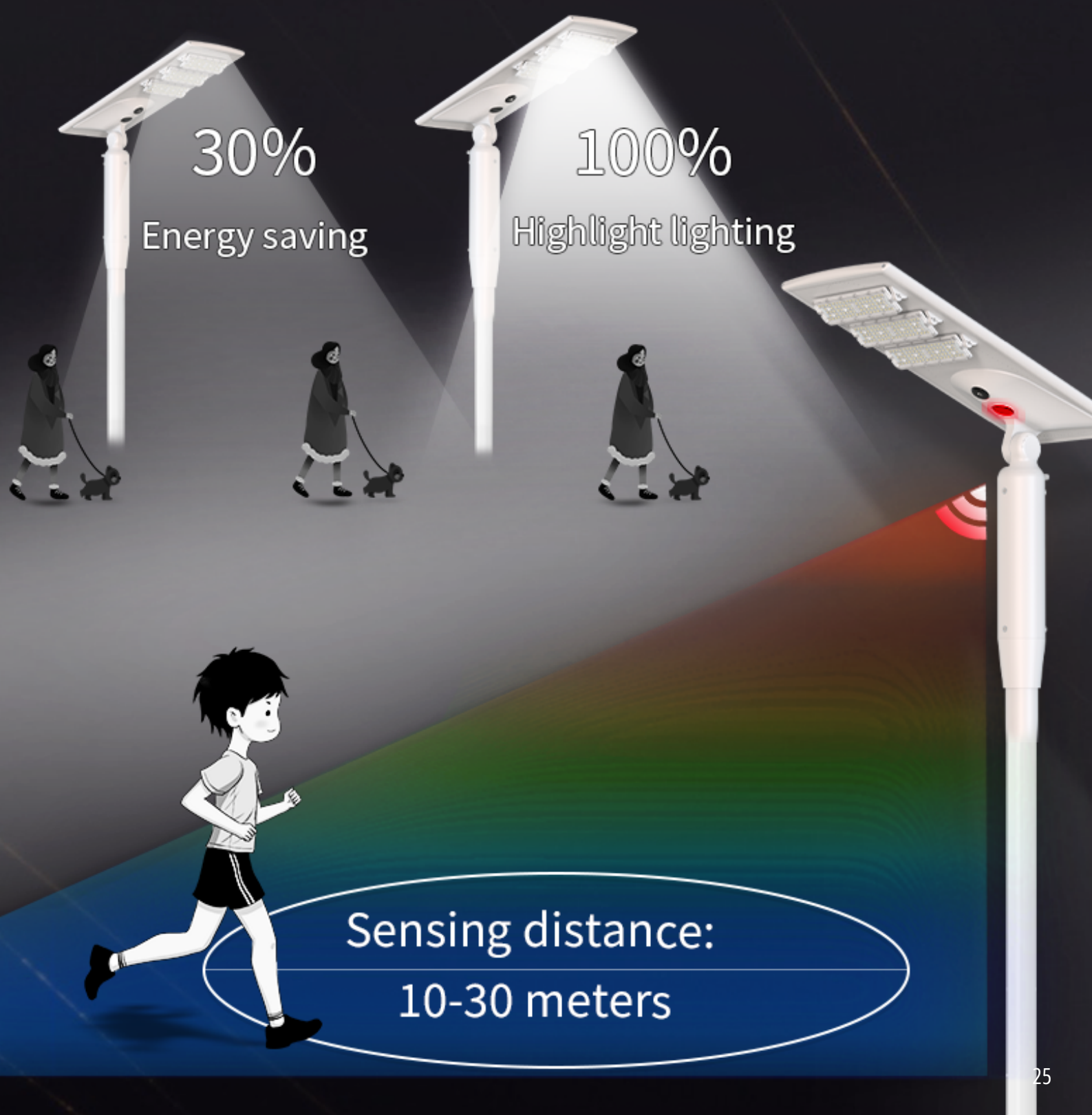




# Infrared human body intelligent sensing

10-30 meters long sensing distance

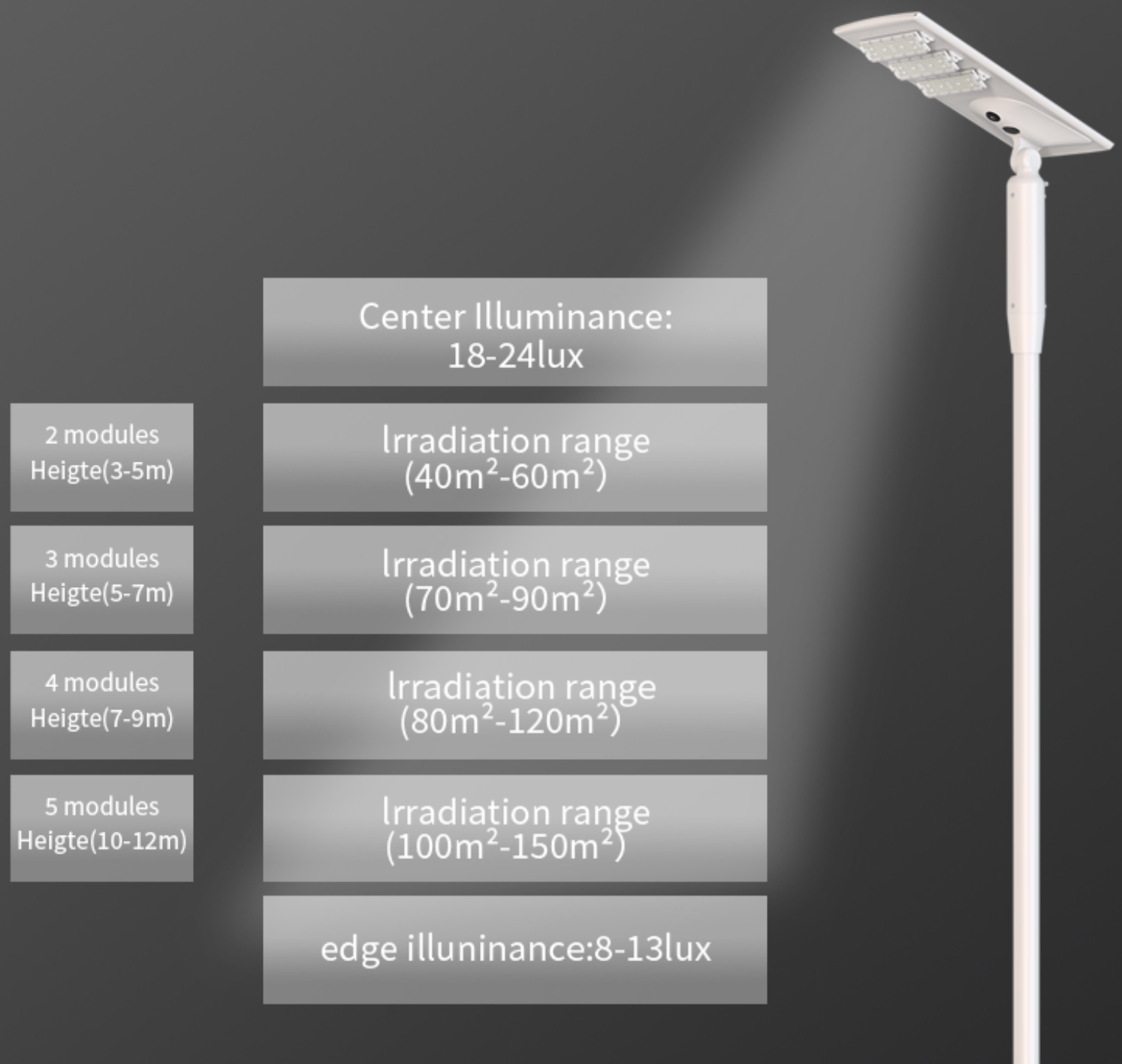
30%-100% automatic adjustment of brightness and darkness





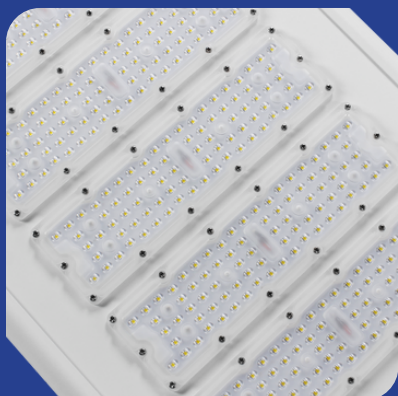
# Irradiation AREA Reference

(Note: The specific illuminance value is calculated based on the actual wattage and quantity purchased and the installation height.)



# STANDARD MODEL LIGHT

## 4G CAMERA OPTIONAL



### Parameters Of Standard Street Light

Product model	FL-YTH-KM2-2	FL-YTH-KM2-3	FL-YTH-KM2-3	FL-YTH-KM2-4
Power	50-60w	60-70w	80-90w	90-100w
LED Quantity Total	160Pcs	240Pcs	320Pcs	400Pcs
Total luminous flux	4000-6000lm	6000-8000lm	8000-10000lm	10000-12000lm
Battery type	Lithium iron phosphate battery			
Recommended installation height	3-4m	4-5m	5-6m	6-8m
Battery capacity	12.8V/231WH	12.8V/308WH	12.8V/359WH	12.8V/410WH
Solar panels	18V 40W	18V 50W	18V 60W	18V 70W
Beam angle	75°x140°	75°x140°	75°x140°	75°x140°
Product size	802*287.6*179mm	947*287.6*179mm	1151*287.6*179mm	
Net weight	m 8kg	9.38kg	10.58kg	10.67kg
Gross weight	9.22kg	10.72kg	12.14kg	12.23kg
Package Size	840*330*240mm	985*330*240mm	1190*330*240mm	
Installation diameter	Φ76mm/Φ80mm			
Application	Garden courtyard / Park plaza / Municipal highway / New rural countryside road lamp			



# ECONOMIC MODEL LIGHT

NOT CAMERA OPTIONAL



## Product Features

- Double protection function of low temperature and overheating, intelligent power mode.
- Philips LED chip with high light efficiency which can reach 160LM/W.
- With lithium iron phosphate battery, good high temperature resistance and long cycle life.
- Using high-efficiency monocrystalline silicon solar panels.
- Human body induction/microwave induction Lights up 12 hours every night.
- Application: Garden courtyard / park square / municipal road / new rural country road.



## ZERO COST OF ELECTRICITY, FREE WIRING INSTALLATION



## Parameters Of Economic Street Light

Product model	FL-YTH-KM1-1	FL-YTH-KM1-2	FL-YTH-KM1-3	FL-YTH-KM1-4
Power	10-20w	30-40w	40-50w	60-70w
LED Quantity	42Pcs	64Pcs	60Pcs	80Pcs
Total light	1600lm	3200lm	4800lm	6400lm
Battery type	Lithium iron phosphate battery			
Recommended installation height	3-4m	4-5m	5-6m	6-8m
Battery capacity	12.8V/9AH	12.8V/15AH	12.8V/18AH	12.8V/21AH
Solar panels	18V 24W	18V 36W	18V 48W	
Beam angle	60°x150°	80°x150°	65°x135°	60°x130°
Product size	802*287.6*179mm	947*287.6*179mm	1151*287.6*179mm	
Net weight	8kg	9.38kg	10.58kg	10.67kg
Gross weight	9.22kg	10.72kg	12.14kg	12.23kg
Package Size	840*330*240mm	985*330*240mm	1190*330*240mm	
Installation diameter	Φ60mm			
Application	Garden courtyard / Park plaza / Municipal highway / New rural countryside road lamp			



AUTO CHARGE AT DAYTIME

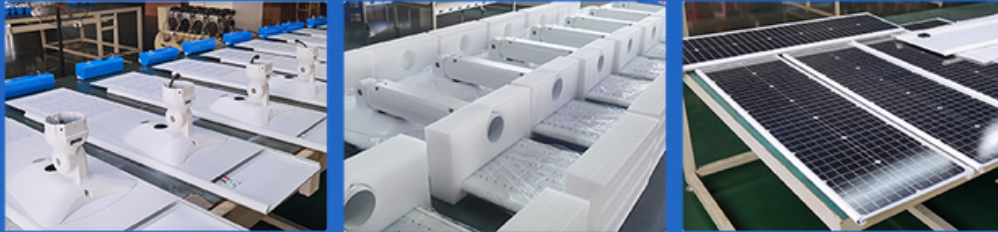


AUTO LIGHT AT NIGHT



## PRODUCTION CAPACITY QUALITY ASSURANCE

Always adhere to the "responsible for the quality of every product"  
From the source to the shipment, the quality inspection strictly  
controls the details



## PRODUCTION CAPACITY QUALITY ASSURANCE

Foldable, small size, easy to transport, save freight  
We can accept your special requirements, so that you can save your  
worries and effort.



## CUSTOM WOODEN CRATE

Bulk customer support customizable wooden boxes  
High-quality wood outer box can effectively protect the product.



## THICKENED CARTON PACKAGING

Customer samples are packed in multi-layer thickened cartons  
Note: Additional customization fee applies.

