SZG551M series of remote camera solar led street light

Applications:

SZG551M remote camera solar led street light is widely used as lighting and remote security monitoring by wifi or 4G internet online in the followings.

- urban main roads, secondary roads
- county, township, town, village road
- industrial and mining plant road
- tourist attractions and resort road
- park, parking roads
- villas and high-end residential roads

Description of performances:

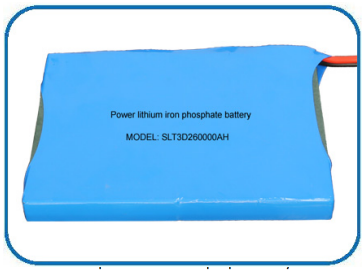
❖ *1080P HD camera*

- 1080P resolution and 2 million pixels
- infrared night vision increased for clear video at night
- no missing any corner by means of 360° horizontal cloud platform
- H.265 video coding to save more storage space
- intelligent detection, sound alarm and picture push
- support multi-terminal remote viewing(windows, android, apple)
- automatic cycle video
- wifi or 4G for remote monitoring

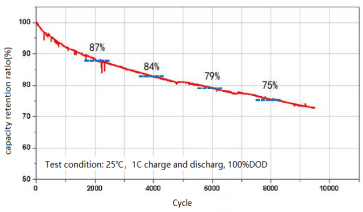
❖ *Super brightness Philips led chip*

- led chip luminous efficiency：230 lm/W @30mA
- light efficiency of luminaire：≥180 lm/W
- The thermal resistance is only 3℃ and 75% lower
- The illuminance is 20%-30% higher
- average service life：≥100,000 hours
- no blue light hazard

❖ *Power lithium iron phosphate battery*



- used for electric car, electric bike, solar light, energy storage
- cycle life：⩾3000 cycles for more than 8 years' use
- cell capacity：6000mAh
- Less than 3mΩ internal resistance can reduce internal energy loss and offer high current discharge.
- High temperature discharge efficiency is over 95%.
- Low temperature discharge efficiency is about 70%.
- free of cobalt and other heavy metals
- no fire, no explosion, absolutely safe and reliable

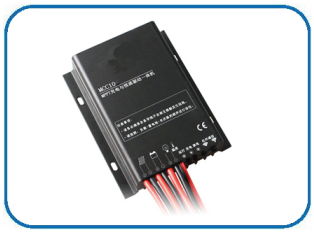


❖ *High efficiency solar panel from Taiwan*

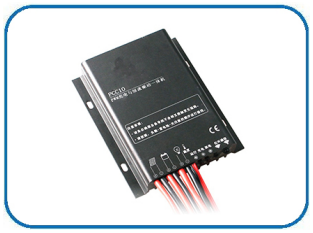
- poly solar wafers imported from Taiwan
- solar conversion efficiency：≥20%
- wafer specification：156*156 mm
- lifespan：≥20 years

❖ *Intelligent solar controller*

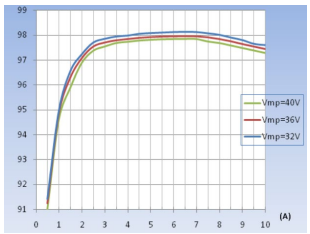
- adopting MPPT technology to track the maximum power of solar panel
- MPPT efficiency：≥99.9%
- charge conversion efficiency：≥98.5%（MPPT）
  ≥94.5%（PWM）
- constant current drive efficiency：≥96%（MPPT）
  ≥95%（PWM）
- IPT(intelligent power technology) can adjust the optimal power according to the weather conditions of the next 7 days and the remaining energy of the battery to ensure 365 days' lighting every day
- control mode: light control, time control, induction control

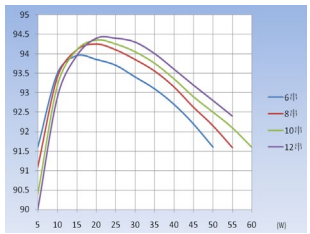


MPPT controller



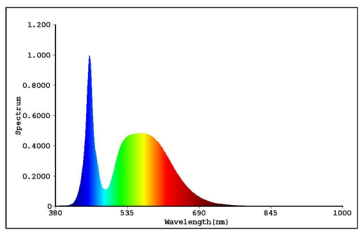
PWM controller

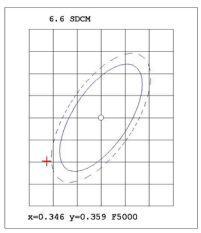




Test report for led chip:

Spectrum Test Report





Color Parameters:

Chromaticity Coordinate(2Deg):x=0.3347 y=0.3492/u'=0.2053 v'=0.4819 duv=3.134e-003
Tc=5410K Dominant WL:Ld=558.0nm Purity=5.2%
Ratio:R=14.0% G=82.2% B=3.8% Peak WL:Lp=453.1nm HWL:17.2nm
Render Index:Ra=75.9

R1 =73.76	R2 =81.05	R3 =84.21	R4 =75.46	R5 =73.73
R6 =72.76	R7 =84.81	R8 =61.67	R9 =-15.45	R10=52.76
R11=71.59	R12=42.32	R13=75.35	R14=90.99	R15=69.42

TM30 Parameters: Rf = 74.3, Rg:93.3

Photo Parameters:

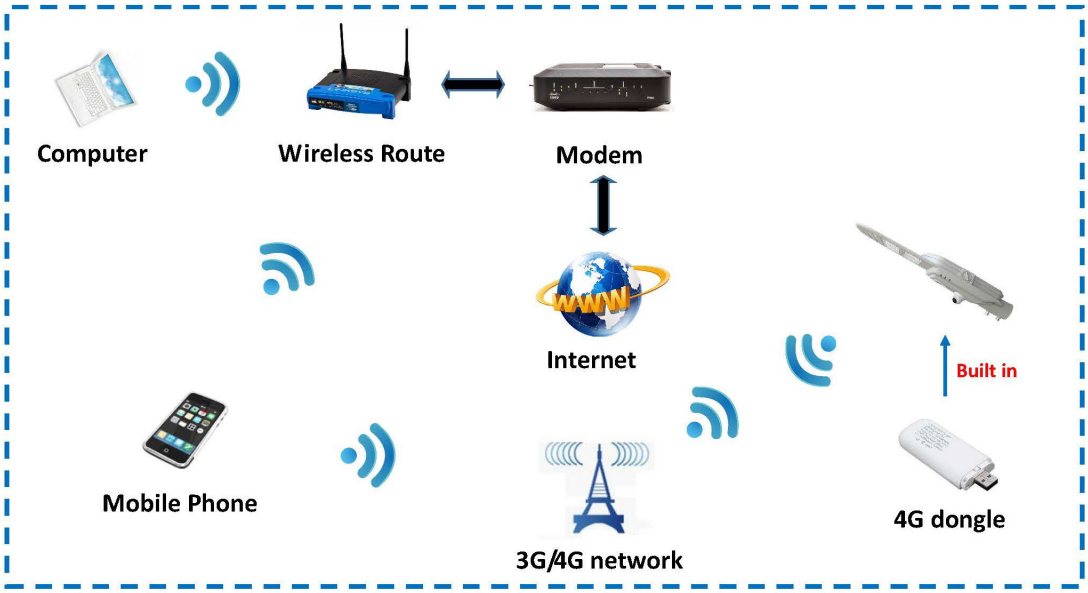
Flux = 49.14 lm Eff. : 225.42 lm/W Fe = 142.0 mW

Electrical parameters:

VF = 5.466 V IF = 39.90 mA P = 218.0 mW Ch1
LEVEL:**[OUT] WHITE:ANSI_5700K

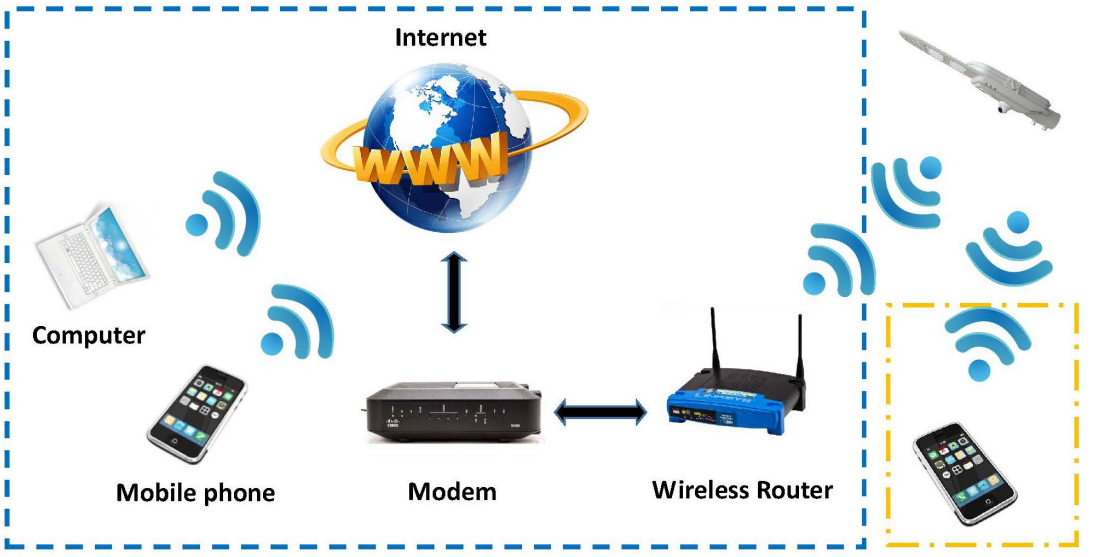
Status: T=201.00ms Ip=26653 (41%) [HAAS1200_V1_USB] V2.00.288

SIM card(4G dongle) remote network work-mode:



SIM network work-mode for camera

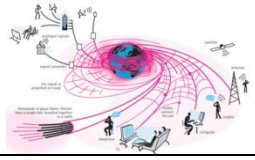
Wifi remote network work-mode and AP work-mode:



Network Work-Mode for camera

AP Work-Mode for camera

Comparison with CCTV camera:

 SZG551M remote camera solar led street light with wifi/4G	No need	Communication optical cable 	Need	 CCTV monitor camera
	No need	Electric power cable 	Need	
	No need	Monitoring center 	Need	
	No need	Monitoring system storage room 	Need	
	Yes	Cryptic camera 	No	

Product details:

microwave sensor（optional）

horizontal calibration unit

knob lock for electric box

Technical parameters:

parameter items	60W	80W
Brand of led chip	Philips	Philips
Luminous efficiency for led（lm/W）	230 lm/W	230 lm/W
Total luminous flux（lm）	6900±5% lm	9200±5% lm
Light efficiency of luminaire（lm/W）	180 lm/W	180 lm/W
Beam angle	140°*70°	140°*70°
Correlated color temperature（K）	3000-6500K	3000-6500K
Color rendering index（Ra）	75Ra	75Ra
LED lifespan（h）	100000 hrs	100000 hrs
Type of battery	LFP battery	LFP battery
Capacity of battery	380Wh	480Wh
Lifespan of battery	≥3000 cycle	≥3000 cycle
Charging time（h）	6-7 hrs	6-7 hrs
Continuous rainy days	7-10 days	7-10 days
Power of poly solar panel	80W	100W
HD camera	1080P	1080P
TF card	Max. 128G	Max. 128G
Camera operation time	24 hrs	24 hrs
Stored days of data	～30 days	～30 days
Angle of camera lens	120°	120°
Video format	avi	avi
Communication mode	4G / wifi	4G / wifi
Monitoring mode	Remote monitor	Remote monitor
Operating control mode	mobile phone/computer	Mobile phone/computer
Operating system of mobile	IOS/Android system/windows	IOS/Android system/windows
Shell material	ADC12	ADC12
Material of lens cover	PC	PC
Modular quantity of lens cover	4 pcs	4 pcs
Discharging temperature	-20～+60℃	-20～+60℃
Charging temperature	-5～+55℃	-5～+55℃
IP protection	IP65	IP65
Dimension（mm）	745*300*100	745*300*100
Weight（Kg）	6.5	6.5
Diameter of mounting pipe	φ60 mm	φ60 mm
Recommended mounting height	6-7 m	7-8 m

Note: Microwave sensor can be customized.