

# SZG601 remote intelligent led high bay light



## Applications:

- large manufacturing plant
- warehouse for large manufacturing enterprises
- major maintenance workshops such as railways and airports
- logistics storage centre
- convention and exhibition centre
- exhibition hall
- indoor sports venues

## Description of performances:

brand of led chip	luminous efficiency for led	beam angle	heat dissipation mode
<b>PHILIPS</b>	≥190 lm/W	120°/90°/60°	heat dissipation by air convection and radiation
led driver	wireless communication	transmission distance (LoRaWAN)	LoRaWAN Max coverage area
Meanwell	LoRaWAN /NB-IoT	15Km (visual) 2Km (urban)	700Km <sup>2</sup>
software	network access mode	controllable quantity	
use free	2G/3G/4G/LAN (LoRaWAN)	300-800 pcs (based on visual/urban distance)	

LoRaWAN gateway  
470 / 868 / 915MHz



## Component pictures of system



LoRaWAN gateway



LoRaWAN slave controller

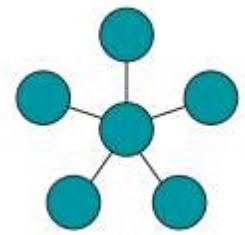
## LoRaWAN gateway:

LoRaWAN gateway is a communication one based on LoRaWAN protocol standard, and it is the key node equipment to build low power wide area network. The gateway has the ability of full duplex data forwarding, which can meet the networking requirements of characteristic terminal devices, such as high communication distance, low power consumption, more access points and so on, and supports a variety of styles of deployment. This gateway communicates directly with lamps and lanterns and is not affected by other damaged lamps. This gateway controls the maximum radius range of lamps and lanterns: 15km (visual distance) / 2km (urban distance). All lamps and lanterns in general industrial and mining enterprises are within the control radius of the gateway.

LoRaWAN gateway directly makes point-to-point communication with slave controller like star control structure model so that the communication distance is long and signal is stable.



LoRaWAN gateway



Star control structure model

## LoRaWAN slave controller:

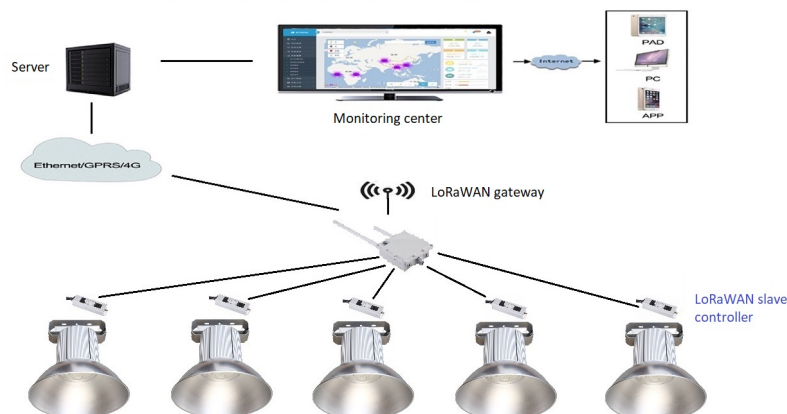
LoRaWAN slave controller adopts narrow band LoRaWAN communication technology, which has excellent wireless communication ability, such as long communication distance, high sensitivity, strong anti-interference performance, low power consumption and so on. The product has the function of single lamp intelligent switch and dimming, the function of power network parameter detection and the function of energy saving income analysis.



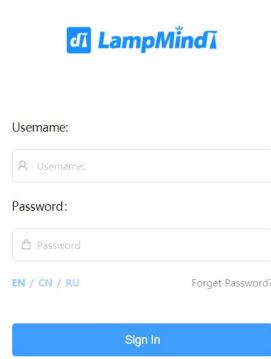
LoRaWAN slave controller

## System topology:

LoRaWAN Intelligent Lighting Cloud Control System



## Background management software (part of the interfaces) :



**LampMind I**

Username:

Password:

EN / CN / RU [Forget Password?](#)

**Sign In**

### Create the best management experience for you

The urban street lamp management system is a smart city management system based on the Internet of Things platform and unified management of urban street lamps from different angles such as time and space. The urban street lamp management system consists of street lights and cloud management platforms distributed in various streets. Based on the GIS map integrated with the street lamp position, the visual management platform is built. The cloud can complete the real-time monitoring of the street lights in the platform, group management, and real-time policy configuration adjustment... complete the operation with one click. To improve work efficiency and reduce energy consumption, Yunzhisheng is willing to work with you to build a blue sky for urban development.

**GIS Map**

The GIS map controls all your street light data on one screen, the icons are visually viewed, and the operation is in one step, so that your management work is smooth.

**Device management**

Segment each section to quickly locate the functional locations you need, loops, groupings, and strategies let you manage street lights more intelligently.

**Alarm**

Faulty equipment timely alarm, maintenance scheduling, fault work order multiple choices to follow up in real time, so that your daily maintenance is no longer troublesome.

Control station GIS Map

**Device management**

- Device Summary
- Lamp management
- Grouping strategy
- Loop management
- Smart light pole
- Surveillance cameras
- Emergency lamp manag...
- Historical report
- Alarm
- Electricity charge ma...
- account information


+ Enter the Large Screen mode

0/45  
Current number of lights / total

Turn-on ratio:

0%

lamp power consumption line chart



Information

**The Number of Device** 50

- Company
- Address
- Area

● Lamp 45   ● Lamp-post 2

Device Log

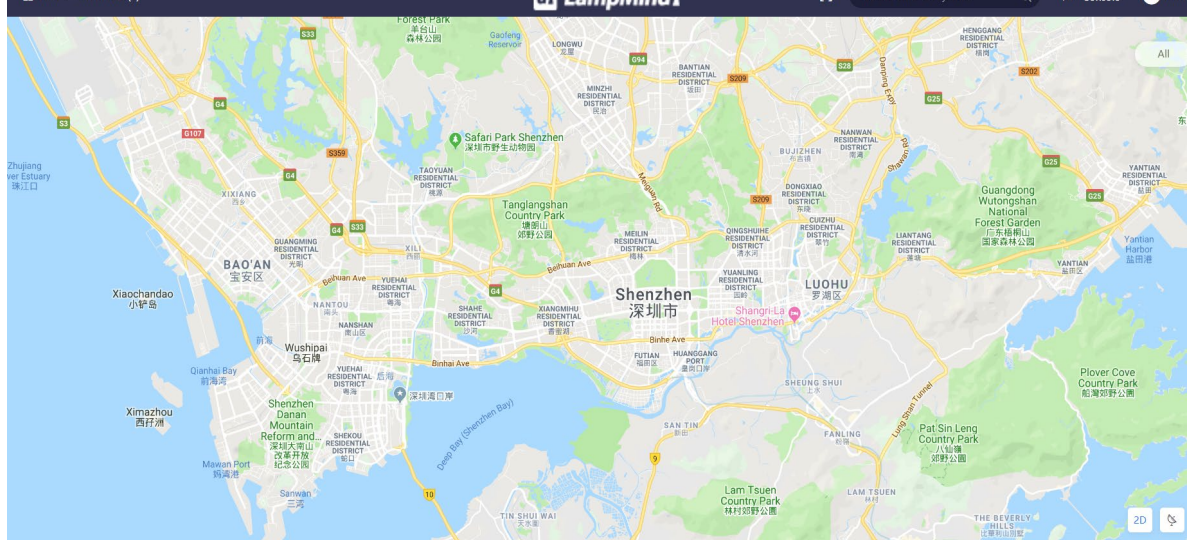
● Lamp Log   ● Lamp-post Log   ● Realtime Monito   ● Untreated fault

Operator	Operating time	Content	Type
hiiot	2019-06-29 11:18:58	Dimming lamp....	Dimmin...
hiiot	2019-06-29 11:18:25	Dimming lamp....	Dimmin...
HI-IOT	2019-06-29 11:16:22	Add lamp area....	Insert
HI-IOT	2019-06-29 11:01:15	Add lamp area....	Insert

Peru — test road (0) LampMind I

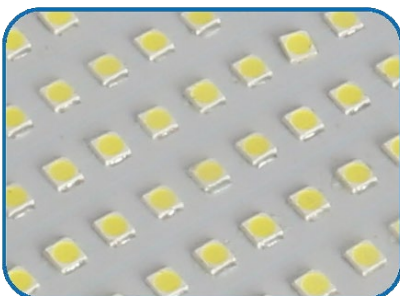
Please enter a keyword



## Technical parameters:

parameter items	100W	150W	200W
Input voltage (V)	90-305Vac	90-305Vac	90-305Vac
Power efficiency	91%	91%	91%
Power factor	0.98	0.98	0.98
Surge lightning protection (V)	6000	6000	6000
Total harmonic distortion	≤10%	≤10%	≤10%
Brand of led chip	Philips	Philips	Philips
Quantity of led chip (pcs)	210	210	210
Luminous efficiency for led (lm/W)	≥190	≥190	≥190
Total luminous flux (lm)	19,000±5%	28,000±5%	38,000±5%
Light efficiency for luminaire (lm/W)	150	150	150
Correlated color temperature (K)	4000-6500	4000-6500	4000-6500
Color rendering index (Ra)	≥75	≥75	≥75
Beam angle (°)	120°/90°/60°	120°/90°/60°	120°/90°/60°
LED lifespan (h)	100,000	100,000	100,000
Material of heat dissipation	extruded aluminum alloy	extruded aluminum alloy	extruded aluminum alloy
Material of reflector	high purity aluminum alloy	high purity aluminum alloy	high purity aluminum alloy
Heat dissipation mode	air convection+radiation	air convection+radiation	air convection+radiation
LoRaWAN intelligent lighting	default	default	default
NB-IoT intelligent lighting	optional	optional	optional
Working temperature (°C)	-40~+50°C	-40~+50°C	-40~+50°C
IP protection	IP65	IP65	IP65
Installation mode of led driver	built-in	built-in	built-in
Dimensions (mm)	φ430×365	φ430×385	φ430×415
Weight (Kg)	5.5	6.0	6.5
Mounting mode	bracket / ring	bracket / ring	bracket / ring

## Product details:



High brightness Philips chip  
(190 lm/W)



Extruded aluminum  
heat dissipation



High efficiency sandblasting  
aluminum reflector