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
PHILIPS	≥190 lm/W	120°/90°/60°	heat dissipation by air convection and radiation

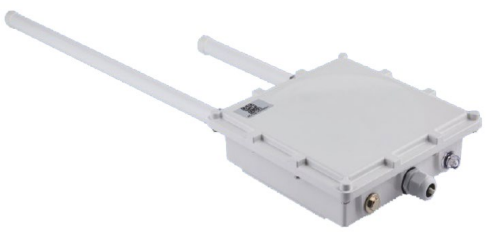
led driver	wireless communication	transmission distance (LoRaWAN)	LoRaWAN Max coverage area
Meanwell	LoRaWAN /NB-IoT	15Km（visual） 2Km（urban）	700Km^2

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

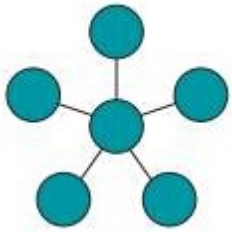
LoRaWAN slave controller

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



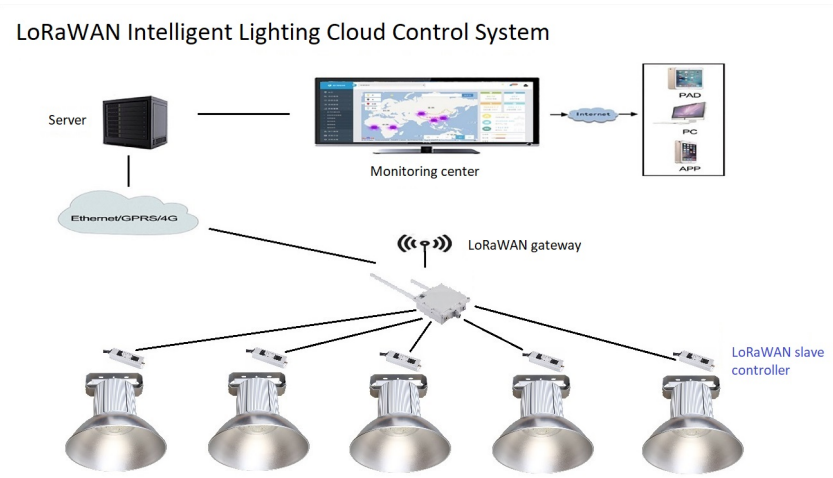
Star control structure model

LoRaWAN slave controller:

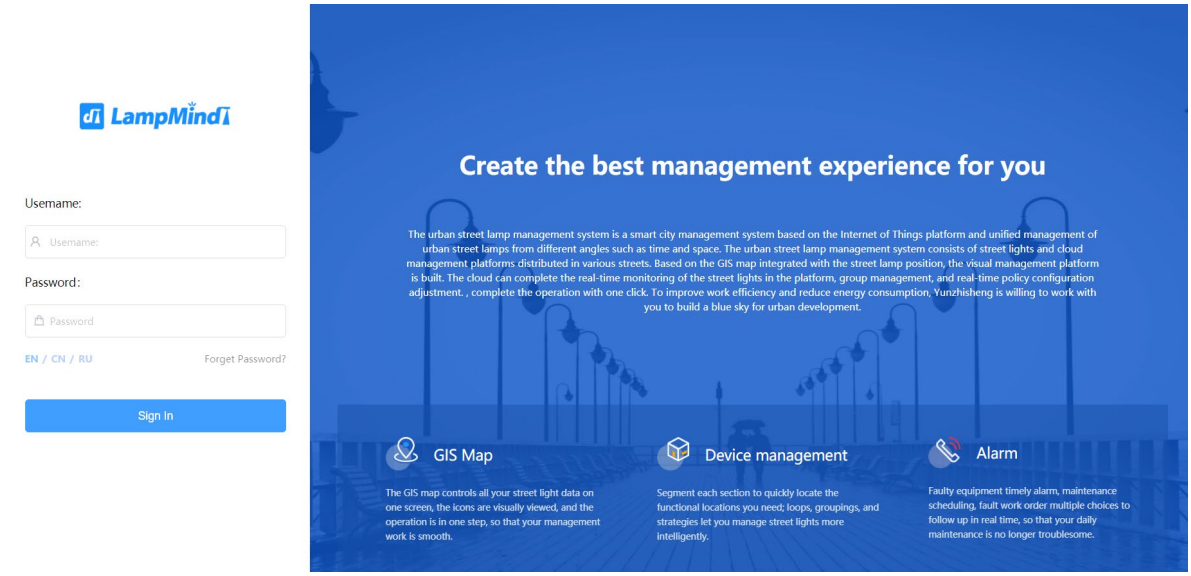
LoRaWAN slave controller adopts narrow band LoRaWAN communication technology, which has excellent wireless communication ability, such as long communication distance, high sensitivity, strong anti-interference performance, low power consumption and so on. The product has the function of single lamp intelligent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

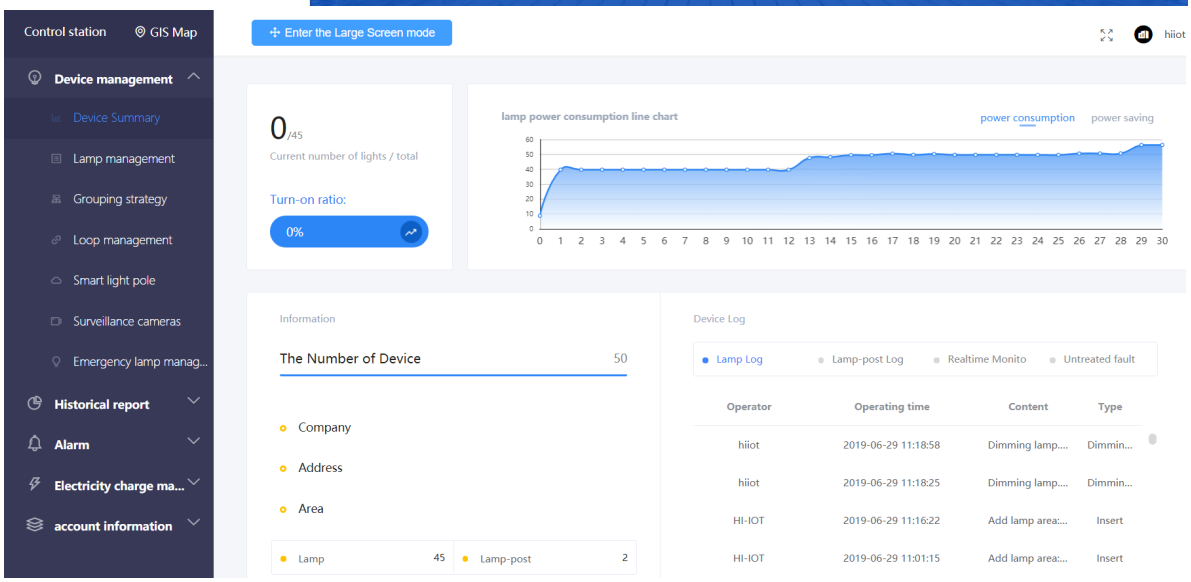
LoRaWAN slave controller

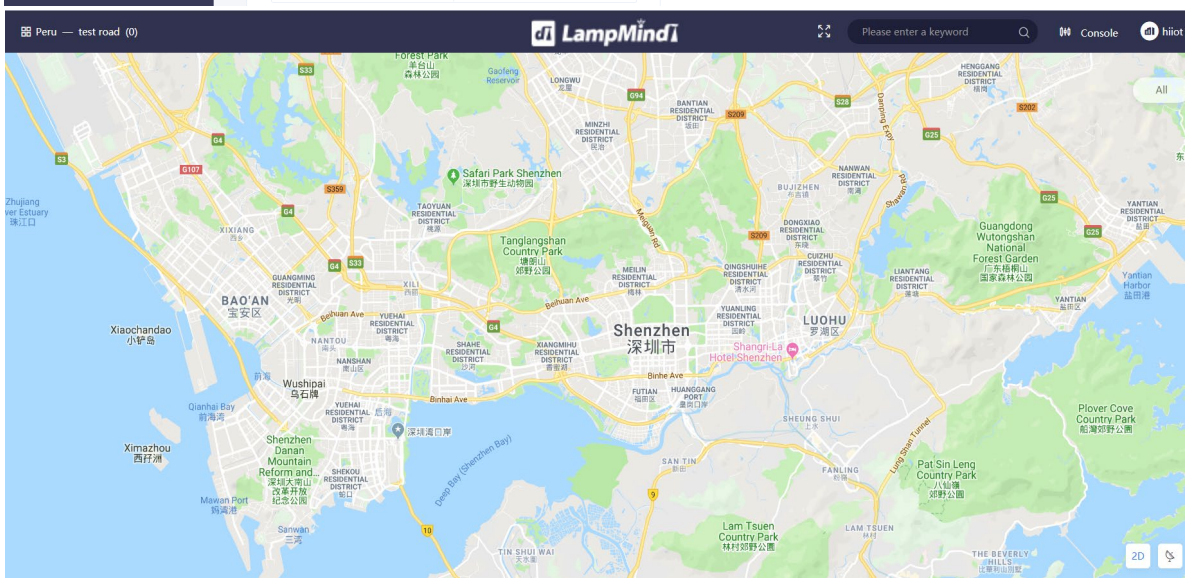
System topology:



Background management software（part of the interfaces）：



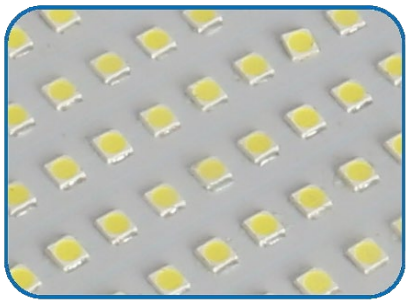




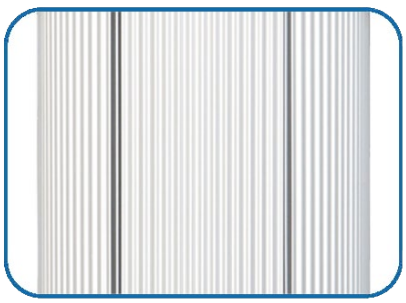
Technical parameters:

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（℃）	-40～+50℃	-40～+50℃	-40～+50℃
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