



CATALOG 2025

Expert of Outdoor lighting & Industrial lighting

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Guangdong Penel Optoelectronics Technology Co.,Ltd

广东省派乐光电技术有限公司



www.penel.cc

About Us

PENEL are a leading high-tech enterprise in China, specialized in R&D, manufacturing and marketing high quality outdoor LED lights, with 19 years of exporting experiences. Our products line include :High power LED Sports lights, AC and Solar led Street lights, LED High Bay lights, Garden lights. All of the products are TUV GS, CB, CE & ROHS approved, with 5 years warranty. 100% of our products are exported. With many years' experiences of working with direct overseas markets, we know very well about overseas buyers and know how to serve and support them.

Rather than just a supplier, we're more a professional partner of customers. What we supply are not only the best cost-effective products with competitive ratio of quality/price than our competitors, but also professional services. With our professionalism and experiences, we do simulation and calculation of lighting effects for different projects, to help customers to work out the best solution. We've accumulated rich experiences of successful projects cases and good feedbacks from worldwide customers, including our sports lights being used in stadiums of World-class matches performing a successful illumination, and our streetlights being used for government projects in different countries.

Based on our strong R&D ability, each year we keep developing new products with our private design, which can better fit the needs of customers, with a more excellent performance. "Product and Service" are the great value we're continually offering to customers.

Under ISO9001:2000 quality management system, to increase production efficiency and quality, our factory have many modern labor-free machines, such as automatic screw machines, automatic glue machines, SMT machines, reflow oven etc, with a monthly capacity of 100,000pcs of LED fixtures. Also we have many advanced testing devices, such as IES test room, EMC tester, Surge tester, Corrosion tester, Optical tester, Constant temperature and humidity chamber, Multichannel temperature tester, and advanced 3D printers etc for R&D work.

In 2024, we have purchased a new factory building in Jiangmeng city. The new manufacturing base is with greater production capacity and better supply chain location, which has further improved our customer service capabilities.

Continually offering great value to customers make sure our sustainable development. Welcome to visit our new factory in Jiangmen!



Factory Pictures



Lobby



R&D Room



Showroom



SMT Workshop



Workshop



Warehouse



Office



Building

R&D and QC



EMI (Electro-Magnetic Interference) Test



Surge Protection Test



Goniophotometer (IES test room)



Corrosion Proof Test (Salt-Spray Test)



Waterproof Test Chamber



Optical Test



Aging Test



Multichannel Temperature Tester



Constant Temp & Humi test chamber



3D Printer



Air leak tester (test sealing of lights)



Hi pot tester



Device to test and charge the battery pack



Device to test the battery cell



Device to test solar panel

Production Devices



Auto SMT Machine



Reflow Oven



Auto Screw Machine



Auto Glue Machine



Laser Printer

FL-NS07XL Series

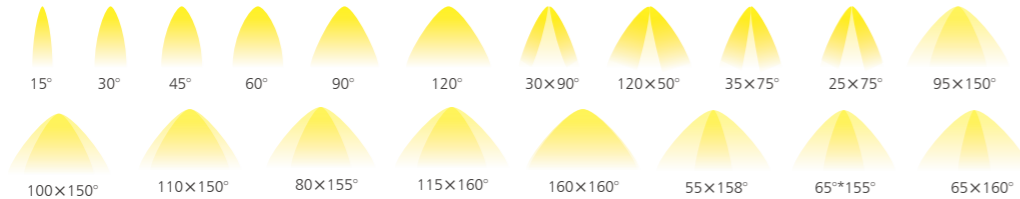


1000W Modular High-end LED Sports Light (Flood Light)

- One single module with 1000watt , lighter, simpler, and much easier for installation, save your cost.
- With various beam angles, suitable for sports fields, squares, parks, ports, construction sites etc.
- 11KG pure aluminum heat-sink , ensuring good heat dissipation.
- 150Lm/w, , high brightness
- DMX512 / DALI-2 or D4i compatible (optional)



Beam angles available



Specification

Model No.	FL-1000W-NS07XL
Power Watt	1000Watt
Product dimension(mm)	642*465.63*176.68
LM/W	150 lm/w
Light source	1152pcs of Cree brand SMD3030 chips
Lens beam angle	15° / 30° / 45° / 60° / 90° / 120° / 120x50° / 90x30° / 100x150° / 110x150° / 95x150° / 80x155° / 115x160° / 160x160° / 35x75° / 25x75° / 65x160° / 65x155° / 55x158°
CRI	>70 or >80 or >90
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K
IP Rating	IP66
Input voltage	100-305VAC
Power factor	>0.95
THD	<10%
Surge protection level	DM 6kV, CM 10kV (without SPD), With 10KV/20KV SPD is suggested
Optional dimming types	1-5V, 1-10V, 10V PWM, Timing dimming, DALI-2, D4i, DMX512

FL-NS08 Series

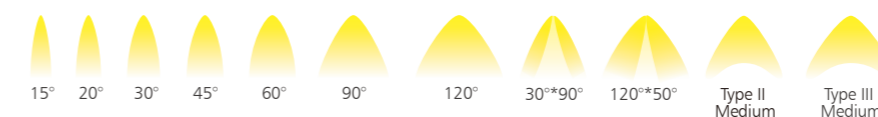


Perfect Corrosion-proof Anti-glare High Power LED Flood Light

- Perfect corrosion-proof,no worries even installing at seaside, fishing boats etc.
- With integrated anti-glare shield
- Various of beam angles available:15°/20°/30°/45°/60°/90°/120°/120°*50°/30°*90°
- Heat-sink: Die-casting aluminum; Cover-of-driver:Profile aluminum; Bracket: Stainless steel
- Application:All kinds of sports fields such as Soccer field, Hockey field, Tennis court, Basketball court , Rugby field, Baseball field, Golf course etc, Tunnel , Park , Garden, Fishing-boats etc.



Beam angles available



Specification

Model No.	FL-250W-NS08	FL-500W-NS08	FL-750W-NS08	FL-1000W-NS08	FL-1250W-NS08	FL-1500W-NS08
Power Watt	250Watt	500Watt	750Watt	1000Watt	1250Watt	1500Watt
Product dimension	518*140*217mm	545*320*378mm	545*500*463mm	545*680*708mm	545*860*713mm	545*1040*714mm
Light source	288/432pcs of Cree SMD3030 chips	576/864pcs of Cree SMD3030 chips	864/1296pcs of Cree SMD3030 chips	1152/1728pcs of Cree SMD3030 chips	1440/2160pcs of Cree SMD3030 chips	1728/2592pcs of Cree SMD3030 chips
Lens beam angle	15°/20°/30°/45°/60°/90°/120°/120°*50°/30°*90°/Type II Medium / Type III Medium					
LM/W	135lm/w in average with 432 chips /module					
CRI	>70 or >80 or >90					
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K					
IP Rating	IP66					
Input voltage	100-305VAC					
Power factor	>0.95					
Driver efficiency	>90%					
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested					

FL-NS07L Series

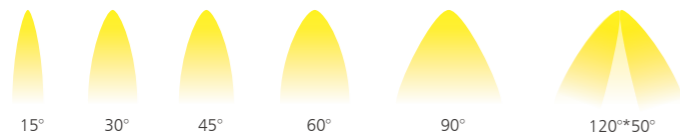


High Lumens LED Sports Light

- New Private mold, 500W each module, 500W to 2000W available.
- 15°/30°/45°/60°/90° beam angle optional
- Using Epistar SMD5050 Chips+Meanwell driver, The whole lamp Lumen efficiency can reach: 150-160 LM/W, 5 years warranty.
- Each module can be adjustable ±90°
- PC lens & glass cover optional
- Perfect corrosion-proof: Pure aluminum for mainhousing, Galvanized plate+painting for bracket and driver cover, 304 stainless steel screws
- Widely used in tennis court, football/basketball/rugby/baseball fields, tunnel, warehouse,ect.



Beam angles available



Specification

Model No.	FL-500W-NS07L	FL-1000W-NS07L	FL-1500W-NS07L	FL-2000W-NS07L
Power Watt	500Watt	1000Watt	1500Watt	2000Watt
Product dimension	550*330*220mm	550* 690* 220mm	550*720*220mm	550* 1080* 220mm
Light source	230pcs of Cree SMD5050 chips	460pcs of Cree SMD5050 chips	690pcs of Cree SMD5050 chips	920pcs of Cree SMD5050 chips
Lens beam angle	15°/30°/45°/60°/90°/120°*50°			
LM/W	150LM/W used of Cree chips			
CRI	>70 or >80 or >90			
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K			
IP Rating	IP66			
Input voltage	100-305VAC			
Power factor	>0.95			
Driver efficiency	>90%			
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested			

FL-NS07M Series

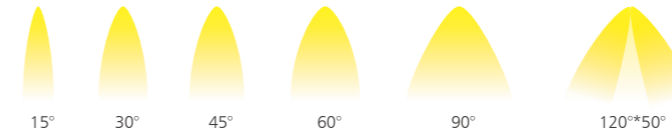


High Lumens LED Sports Light

- New Private mold, 250W/module, 250W~1200W available.
- Fashionable outlooking, Reliable IP66 waterproof structure design
- Narrow beam angle(15/30 degrees) and 45/60/90 degrees optional, can illuminate 35-40m distance
- High Lumen efficiency up to 160 LM/W
- 5 years warranty, Meanwell driver+world famous brand chips
- Super competitive ratio of quality/price, easy to sell
- Perfect corrosion-proof: Pure aluminum for main housing, Galvanized plate+painting for bracket and driver cover, 304 stainless steel screws
- Super flexible structure provides the possibility of DIY: you can assemble the 2-3-4 modules by yourself



Beam angles available



Specification

Model No.	FL-250W-NS07M	FL-500W-NS07M	FL-750W-NS07M	FL-1000W-NS07M
Power Watt	250Watt	500Watt	750Watt	1000Watt
Product dimension	405* 215* 200mm	405* 460* 200mm	405* 700* 200mm	405* 948* 200mm
Light source	336pcs of Cree SMD3030 chips	672pcs of Cree SMD3030 chips	1008pcs of Cree SMD3030 chips	1344pcs of Cree SMD3030 chips
Lens beam angle	15°/30°/45°/60°/90°/120°*50°			
LM/W	up to 160 LM/W used of Cree chips			
CRI	>70 or >80 or >90			
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K			
IP Rating	IP66			
Input voltage	100-305VAC			
Power factor	>0.95			
Driver efficiency	>90%			
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested			

FL-NS07S Series

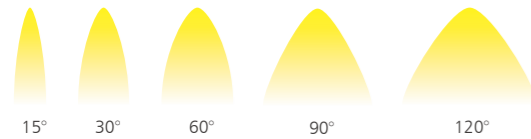


High Lumens LED Sports Light

- Small size, 100W, 150W, 180W available
- Stronger structure, make sure superior heat dissipation, can resist heavy rain, hail and other bad weather
- 15°/ 30°/60°/90°/120° beam angle optional
- Lens cover & glass cover optional
- High Lumen efficiency: 140-160 LM/W
- 5 years warranty, Meanwell driver + world famous brand chips
- IP66, with good waterproof & dustproof



Beam angles available



Specification

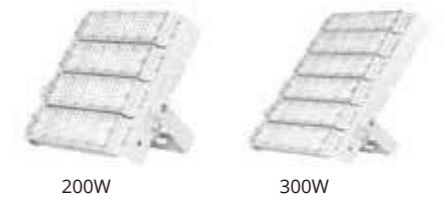
Model No.	FL-100W-NS07S	FL-150W-NS07M	FL-180W-NS07M
Power Watt	100Watt	150Watt	180Watt
Product dimension	296*163*140mm	296*163*140mm	296*163*140mm
Light source	192pcs of Cree SMD3030 chips	192pcs of Cree SMD3030 chips	192pcs of Cree SMD3030 chips
Lens beam angle	15°/30°/60°/90°/120		
LM/W	140LM/W used of Cree chips		
CRI	>70 or >80 or >90		
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K		
IP Rating	IP66		
Input voltage	100-305VAC		
Power factor	>0.95		
Driver efficiency	>90%		
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested		

FL-NS05 Series

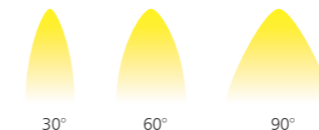


Super Competitive Modular LED Flood Light

- Driver box with vent for better heat dissipation
- More modules are available for higher power to 1000Watt
- Housing material of Modular tunnel light: the heat-sink are pure 6063 aluminum material the driver box and the bracket part are galvanized with painting, duoble protecting from corrosion
- The whole housing can resist corrosion for at least 5 years even installed beside seas



Beam angles available



Specification

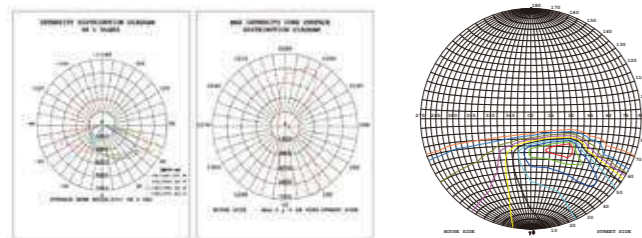
Model No.	FL-200W-NS05	FL-300W-NS05	FL-400W-NS05	FL-500W-NS05	FL-600W-NS05
Power Watt	200Watt	200Watt	400Watt	500Watt	600Watt
Product dimension	310*320*160mm	310* 480*160mm	620* 320 *210mm	620* 400* 210mm	620* 480* 210mm
Light source	256pcs of Cree SMD3030 chips	384pcs of Cree SMD3030 chips	512pcs of Cree SMD3030 chips	640pcs of Cree SMD3030 chips	768pcs of Cree SMD3030 chips
Lens beam angle	30°/60°/90°				
LM/W	up to 140LM/W used of Cree chips				
CRI	>70 or >80 or >90				
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K				
IP Rating	IP66				
Input voltage	100-305VAC				
Power factor	>0.95				
Driver efficiency	>90%				
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested				

STL-NS12 Series



Popular LED Street Light with Toolless Maintenance

- Toolless maintenance available
- Modern looking, Streamlined shape design, perfect painting
- Separable installation joint, you can horizontally or vertically install, to fit poles or arms.
- With 5mm-thick transparent tempered glass cover, avoid lens getting yellow, super long lifetime.
- Angle adjustable, to help you choose a best angle to illuminate the road.



Specification

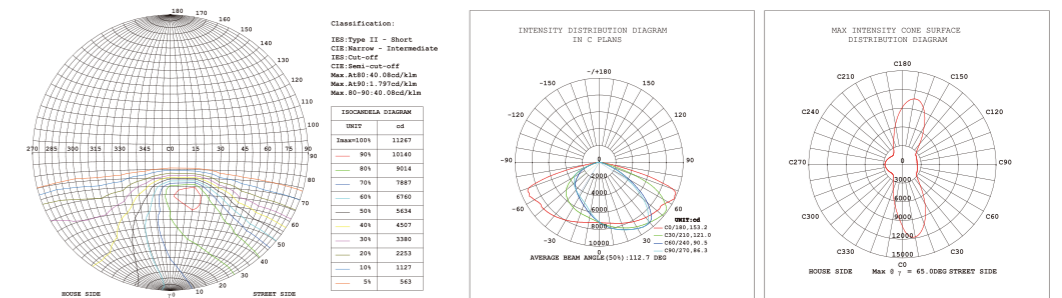
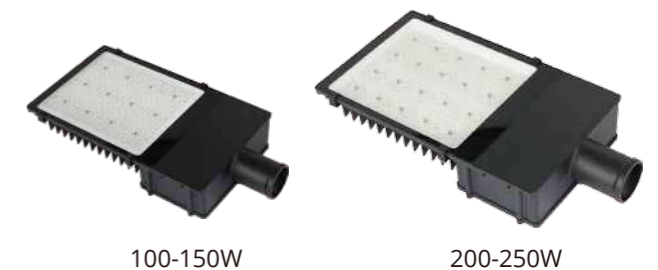
Model No.	STL-50W-NS12	STL-100W-NS12	STL-150W-NS12
Power Watt	50Watt	100Watt	150Watt
Product dimension	555*200*105mm	615*233*100mm	675*260*100mm
Light source	72pcs of Cree SMD3030 chips	108pcs of Cree SMD3030 chips	144pcs of Cree SMD3030 chips
Lens beam angle	150°x80°		
LM/W	140LM/W used of Cree chips		
CRI	>70 or >80 or >90		
Color temperature	3000K, 4000K, 5000K, 5700K, 6500K		
IP Rating	IP66		
Input voltage	100-305VAC		
Power factor	>0.95		
Driver efficiency	>90%		
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested		
Other function options	Can add light sensor(photocell sensor) Timing Dimming		

STL-NS09 Series



160LM/W High Performance LED Street Light

- High lumen efficiency up to 160LM/W
- With 5mm thick transparent tempered glass, avoid lens getting yellow
- Strong structure, enough to resist typhoon and hail
- Private design, modern looking, super durability



Specification

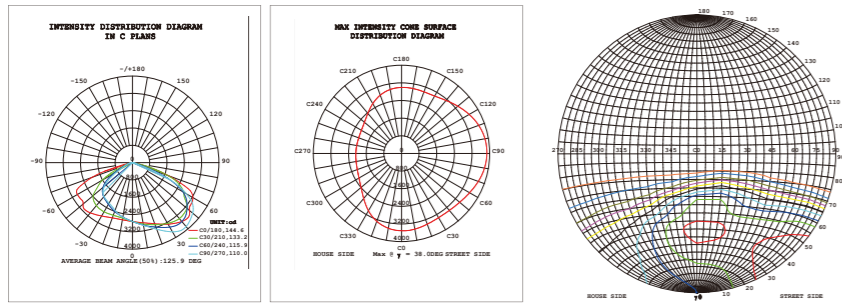
Model No.	STL-100W-NS09	STL-150W-NS09	STL-200W-NS09	STL-250W-NS09
Power Watt	100Watt	150Watt	200Watt	250Watt
Product dimension	473.5*212.7*85mm	473.5*212.7*85mm	563*273*85mm	563*273*85mm
Light source	192pcs of Cree SMD3030 chips	288pcs of Cree SMD3030 chips	320pcs of Cree SMD3030 chips	480pcs of Cree SMD3030 chips
Lens beam angle	150°x80°			
LM/W	160 LM/W used of Cree chips			
CRI	>70 or >80 or >90			
Color temperature	3000K, 4000K, 5000K, 5700K, 6500K			
IP Rating	IP66			
Input voltage	100-305VAC			
Power factor	>0.95			
Driver efficiency	>90%			
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested			
Other function options	Can add light sensor(photocell sensor) Timing Dimming			

STL-NS10 Series



Fashionable LED Street Light

- Modern looking, Streamlined shape design, perfect painting,
- With 5mm-thick transparent tempered glass cover, avoid lens getting yellow, super long lifetime,
- Separable installation joint, you can horizontally or vertically install, to fit poles or arms.



Specification

Model No.	STL-50W-NS10	STL-80W-NS10	STL-120W-NS10	STL-150W-NS10
Power Watt	50Watt	80Watt	120Watt	150Watt
Product dimension	496.4*191*79mm	496.4*191*79mm	610.4*235.7*79mm	610.4*235.7*79mm
Light source	96/144pcs of Cree SMD3030 chips	94/144pcs of Cree SMD3030 chips	192/288pcs of Cree SMD3030 chips	192/288pcs of Cree SMD3030 chips
Lens beam angle	150°*80°			
LM/W	145 LM/W used of Cree chips			
CRI	>70 or >80 or >90			
Color temperature	3000K, 4000K, 5000K, 5700K, 6500K			
IP Rating	IP66			
Input voltage	100-305VAC			
Power factor	>0.95			
Driver efficiency	>90%			
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested			
Other function options	Can add light sensor(photocell sensor) Timing Dimming			

STL-N07 Series



Modular LED Street Light with Toolless Maintenance

- Big, Solid, Strong design
- 138.72LM/W, Used of Philips LED and High Reflectivity reflector
- Toolless entry driver compartment, easy for maintenance
- IP65 Waterproof, Anti-rusty, Anti-corrosion



Specification

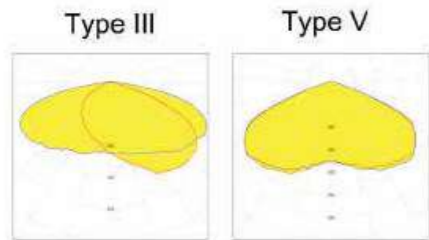
Model No.	STL-100W-N07S	STL-150W-N07M	STL-200W-N07M	STL-240W-N07L	STL-280W-N07L
Power Watt	100W	150W	200W	240W	280W
Product dimension	422*318*132mm	522*318*132mm	522*318*132mm	853*318*132mm	853*318*132mm
Module Qty	3 modules	4 modules	5 modules	6 modules	7 modules
Light source	3*48pcs/module 144pcs Philips chip	4*48pcs/module 192pcs Philips chip	5*48pcs/module 240pcs Philips chip	6*48pcs/module 288pcs Philips chip	7*48pcs/module 366pcs Philips chip
Beam Angle	145°*63°				
LM/W	about 138 LM/W				
CRI	>80 or >90				
Color temperature	3000K,4000K,5000K,5700K,6000K				
IP Rating	IP66				
Input voltage	AC 180-305V OR 90-305VAC				
Power factor	PF≥0.97/115VAC, PF 0.95/230VAC, PF 0.92/277VAC@full load				
Dirver Efficiency	>90%				
THD	>15%				
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested				
Other function options	Can add light sensor(photocell sensor) Timing Dimming				

STL-NS08 Series



Shoobox LED Street Light

- High luminous efficiency, up to 130LM/W
- High quality PC material lens, type III, type V beam angle available, no glare
- Unique patented aluminum die cast design ensures superior heat management, electrostatic & spray processing, anti aging, corrosion resistant
- Special structure design for increasing air convection to make better heat dissipation, at the same time, reducing the windward area
- Meanwell driver, high reliability, 3 in 1 dimming (1~10Vdc or 10V PWM signal or resistance)
- Four types installation kits. Lamp can be mounted on round/square poles, walls, brackets



Specification

Model No.	STL-100W-NS08	STL-200W-NS08	STL-300W-NS08
Power Watt	100Watt	200Watt	300Watt
Product dimension	311*310*84mm	438*310*68mm	600*308*68mm
Light source	1*144pcs/module(144pcs Cree chips)	2*144pcs/module(288pcs Cree chips)	3*144pcs/module(432pcs Cree chips)
Lens beam angle	Type III Type V		
LM/W	130LM/W		
CRI	>80 or >90		
Color temperature	3000K,4000K,5000K,5700K,6000K		
IP Rating	IP66		
Input voltage	100-305VAC		
Power factor	>0.95		
Driver efficiency	>93%		
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested		
Other function options	Can add light sensor(photocell sensor) Timing Dimming		

HBL-NS06 Series



160LM/W New Circular LED High Bay Light

- New design, looks high-grade and different
- Thick heat sink, pure aluminum ,perfect heat-dissipation.
- Up to 160lm/w , more energy-saving , less power consumption to get same brightness
- With microwave sensor (Optional)
- With rectangle driver to instead of round driver . You have more choices for driver brands, very flexible
- 60°/ 90°/120° beam angles available
- Application :Warehouse, Workshop, Factory, underground parking garage, Port and pier, Exhibition center, Refrigeration storage, Library, Railway station, Gas station , Auditorium, etc



Specification

Model No.	HBL-100W-NS06	HBL-150W-NS06	HBL-200W-NS06
Power Watt	100Watt	150Watt	200Watt
Product dimension	D292*H167.3mm	D342*H171.4mm	D382*H174.6mm
Light source	240pcs of Epistar SMD3030 chips	320pcs of Epistar SMD3030 chips	400pcs of Epistar SMD3030 chips
Lens beam angle	3 Options : 60°/ 90°/120°		
LM/W	about 160 lm/w		
CRI	>70		
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K		
IP Rating	IP65		
Input voltage	100-305VAC		
Power factor	>0.95		
Driver efficiency	>90%		
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested		
Other functions options	Can be dimmable , can be with microwave sensor		

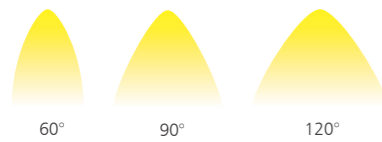
HBL-NS07 Series



140LM/W Circular LED High Bay Light

- Super competitive model , new unique design , private mold
- With high illumination efficiency about 140lm/w
- 60°/ 90°/120° beam angles available
- Very good choice for industrial lighting like warehouse, workshop, factory, gas station etc
- Two installation way optional: Hook or "U" shape bracket

Beam angles available



Specification

Model No.	HBL-100W-NS07	HBL-150W-NS07	HBL-200W-NS07
Power Watt	100Watt	150Watt	200Watt
Product dimension	D210*H111mm	D241*H111mm	D270*H111mm
Light source	144pcs of Epistar SMD3030 chips	192pcs of Epistar SMD3030 chips	288pcs of Epistar SMD3030 chips
Lens beam angle	3 Options : 60°/ 90°/120°		
LM/W	about 140 lm/w		
CRI	>70		
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K		
IP Rating	IP65		
Input voltage	85-300VAC		
Power factor	>0.95		
Driver efficiency	>90%		
Surge protection level	Line-Earth 4KV, Line-Line 2KV		
Other functions options	/		

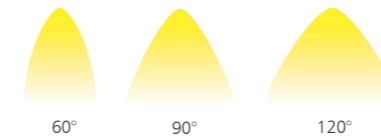
HBL-NS03 Series



150LM/W Circular LED High Bay Light

- Very popular led high bay light by worldwide customers, fashionable circular shape design
- With high illumination efficiency up to 150lm/w
- 60°/ 90°/120° beam angles available
- Very good choice for industrial lighting like warehouse, workshop, factory, gas station etc

Beam angles available



Specification

Model No.	HBL-100W-NS03	HBL-150W-NS03	HBL-200W-NS03
Power Watt	100Watt	150Watt	200Watt
Product dimension	D290*H155mm	D340*H155mm	D390*H155mm
Light source	140pcs of Epistar SMD3030 chips	210pcs of Epistar SMD3030 chips	280pcs of Epistar SMD3030 chips
Lens beam angle	3 Options : 60°/ 90°/120°		
LM/W	about 150 lm/w		
CRI	>70		
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K		
IP Rating	IP65		
Input voltage	100-305VAC		
Power factor	>0.95		
Driver efficiency	>90%		
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested		
Other functions options	Can be dimmable , can be with microwave sensor		

SGL-01 Series



MPPT Controller

Popular Solar LED Garden Light

- Nice and very popular model, suitable for garden, park, beach, streets etc.
- Simple installation, high illumination
- PV panel made of A-grade silicon wafers, LiFePO4 battery pack made of A-grade cell, reliable quality
- 3.2V MPPT controller, very stable performance



Specification

Model No.	SGL-30-01	
Solar Panel	Type :	Monocrystalline Silicon
	Power:	18V 28W
	Dimension (mm) :	(D)500
	Conversion efficiency:	22%
Battery Pack	Type :	LiFe PO4
	Capacity :	3.2V 30AH
	Battery Energy:	96 WH
	Full charging time:	about 4 hours (at enough sunshine)
LED Garden Light	Light source :	100pcs of High lumen chips SMD5050
	Total lumen	About 3000LM
	Light body dimension:	D500*H500
	CRI :	>70
	Color temperature:	3000K/4000K/5000K/5700K/6500K
	Housing Material:	Pure aluminium
Controller	Housing Color:	Black
	Type :	3.2V MPPT independent controller
Working Mode	Type :	With light sensor: light-off when sunrise, light-up when sunset
		Optional to be with microwave sensor
		With time control
Supports Continous Rainy Days		2 days
Installation Height		2-3 meters
IP Rating		IP65
Warranty		3 Years

SGL-02 Series



MPPT Controller

New Solar LED Garden Light

- The square area can arrange more solar cells, thus larger solar panels can be used
- Very easy installation, high illumination
- PV panel made of A-grade silicon wafers, LiFePO4 battery pack made of A-grade cell, reliable quality
- 3.2V MPPT controller, very stable performance



Specification

Model No.	SGL-50-02	
Solar Panel	Type :	Monocrystalline Silicon
	Power:	18V 45W
	Dimension (mm) :	L 504*W504
	Conversion efficiency:	22%
Battery Pack	Type :	LiFe PO4
	Capacity :	3.2V 54AH
	Battery Energy:	172.8WH
	Full charging time:	4.5h (at enough sunshine)
LED Garden Light	Light source :	128pcs of High lumen chips SMD3030
	Total lumen	About 4000LM
	Light body dimension:	L 504*W504*H494
	CRI :	>70
	Color temperature:	3000K/4000K/5000K/5700K/6500K
	Housing Material:	Pure aluminium
Controller	Housing Color:	Black
	Type :	3.2V MPPT independent controller
Working Mode	Type :	With light sensor: light-off when sunrise, light-up when sunset
		Optional to be with microwave sensor
		With time control
Supports Continous Rainy Days		2 days
Installation Height		2-3 meters
IP Rating		IP65
Warranty		3 Years

SST-09 Series



Newly Designed Integrated (all in one) Solar LED Street Light

- One appearance, 2 configurations: A. for city main roads / high way, B. for city secondary roads / square / villages.
- Unique appearance, nice and high-grade, from private mold design.
- Pure aluminum housing, solid, corrosion-proof.
- Easy and fast installation, 180°rotatable to get a best angle, can be installed on either a pole or an arm.
- High quality SMD 5050 chips with high lumen efficiency, to ensure enough illumination but low energy consumption.



Specification

Model No.	Configuration A (MPPT controller) for city main roads / high way		Configuration B (PWM controller) for city secondary roads /villages	
	SST-50-09A	SST-100-09A	SST-50-09B	SST-100-09B
Solar Panel	Type :	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon
	Power:	18V 60W	18V 90W	4.5V 60W
	Dimension (mm) :	664*435 mm	994*435 mm	664*435 mm
	Conversion efficiency:	22%	22%	22%
Battery Pack	Type :	LiFe PO4	LiFe PO4	LiFe PO4
	Capacity :	3.2V 60AH	3.2V 90AH	3.2V 60AH
	Battery Energy:	192 WH	288 WH	192 WH
	Full-charged time :	4 hours (at enough sunshine)	4 hours (at enough sunshine)	4 hours (at enough sunshine)
LED Street Lamp	Light source :	80pcs of High lumen chips SMD5050	160pcs of High lumen chips SMD5050	80pcs of High lumen chips SMD5050
	Total lumen of lamp :	About 4500LM	About 6700LM	About 3400LM
	Lamp dimension(mm):	672.4*445*183 mm	1002.4*445*183 mm	672.4*445*183 mm
	CRI :	>70		>70
	Color temperature:	3000K/4000K/5000K/5700K/6500K		5700K
	Housing Material	Die-casting aluminum		Die-casting aluminum
Controller	Type :	3.2V MPPT independent controller		PWM
	Working Mode	With light sensor: light-off when sunrise, light-up when sunset With microwave sensor(optional) With time control		With light sensor: light-off when sunrise, light-up when sunset With time control
Supports Continous Rainy Days	3 days	3 days	3 days	3 days
Installation Height	5-6 meters	6-7 meters	4-5 meters	5-6 meters
IP Rating	IP65	IP65	IP65	IP65
Warranty	3 Years	3 Years	3 Years	3 Years

SST-02N Series



All-in-one Integrated Solar LED Street Light

- Upgraded version, More Brighter, Longer light-up time, More cost-effective.
- High quality level, suitable for city high way projects.
- Easy installation with 180 degrees adjustable, Save energy, Save money.
- Solid, Strong, Enough to resist typhoon and hail
- Monocrystalline silicon solar panel, 22% conversion efficiency
- Intelligent control, supports 3 rainy days



Specification

Model No.	SST-50-02N	SST-100-02N	SST-150-02N	SST-200-02N	SST-250-02N
Solar Panel	Type :	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon
	Power:	18V 30W	18V 45W	18V 68W	18V 90W
	Dimension (mm) :	525 * 348 mm	770*348 mm	960*393 mm	1130*420 mm
	Conversion efficiency:	22%	22%	22%	22%
Battery Pack	Type :	LiFe PO4	LiFe PO4	LiFe PO4	LiFe PO4
	Capacity :	12.8V 12AH	12.8V 18AH	12.8V 24AH	12.8V 30AH
	Battery Energy:	153.6 WH	230.4WH	307WH	384WH
	Full-charged time :	6 hours (at enough sunshine)	6 hours (at enough sunshine)	5 hours (at enough sunshine)	5 hours (at enough sunshine)
LED Street Lamp	Light source :	64pcs of CREE brand chips SMD3030	128pcs of CREE brand chips SMD3030	192pcs of CREE brand chips SMD3030	256pcs of CREE brand chips SMD3030
	Total lumen of lamp :	About 3000LM	About 5000LM	About 6500LM	About 8000LM
	Lamp dimension(mm):	550*373*155 mm	795*373*155 mm	985*418*155 mm	1155*445*155 mm
	CRI :	>70		>70	>70
	Color temperature:	3000K/4000K/5000K/5700K/6500K			
	Housing Material	die-cast aluminium			
Controller	Type :	PWM			
	Charging efficiency :	90%			
Working Mode	With light sensor				
	With microwave sensor				
	With time control				
Supports Continous Rainy Days	3 days	3 days	3 days	3 days	3 days
Installation Height	4-5 meters	5-7 meters	6-7 meters	6-7 meters	8-10 meters
IP Rating	IP65	IP65	IP65	IP65	IP65
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years

SST-07 Series



New Competitive Integrated (all in one) Solar LED Street Light

- Very suitable for city minor arterial roads, squares, villages, gardens etc.
- High-grade appearance, pure aluminum extrusion profiles material housing.
- Rotatable installation, freely adjust to a best angle for the PV panel and illumination.
- Simply fit either a pole or an arm, flexible.
- High quality SMD3030/SMD5050 chips, ensure a lot higher brightness at same battery consumption.
- PV panel made of A-grade silicon wafers, LiFePO4 battery pack made of A-grade cell, reliable quality.



about 2500lm

about 3500lm

about 5500lm

Specification

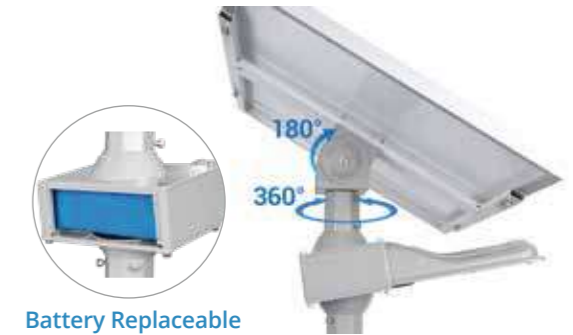
Model No.	SST-50-07	SST-100-07	SST-150-07
Solar Panel	Type :	Monocrystalline Silicon	Monocrystalline Silicon
	Power:	4V 30W	5V 40W
	Dimension (mm) :	502.4x340 mm	672.4*340 mm
Battery Pack	Type :	LiFe PO4	LiFe PO4
	Capacity :	3.2V 24AH	3.2V 30AH
	Battery Energy:	76.8WH	96WH
LED Street Lamp	Full-charged time :	around 3.2h (with enough sunshine)	around 3h (with enough sunshine)
	Light source :	28pcs of high-lumen	60pcs of high-lumen
	Total Lumen :	SMD3030 chips about 2500LM	SMD5050 chips about 3500LM
	CRI :	>70	>70
	Color temperature:	7000K	7000K
	Housing Material	Pure aluminum extrusion profiles	
Housing Color	Silver		
Controller	The controller circuit is integrated in PCB		
Working Mode	Light control + Time control		
Supports Continous Rainy Days	3 days		
Installation Height	4-5 meters	4-5 meters	5-6 meters
IP Rating	IP65	IP65	IP65
Warranty	3 Years	3 Years	3 Years

SST-08 Series



New All-in-two Solar LED Street Light

- PV Panel is 360° adjustable to maximize the use of solar energy
- PV Panel size is not limited, you can choose bigger PV panel to optimize your solution
- Battery box can be openable, easy to replace the battery back
- Solid, Strong, Enough to resist typhoon and hail
- So easy to install like All-in-one type, save your time and cost
- Using more chips and Intelligent control, can reach 10000LM, supports 3 rainy days



Battery Replaceable

Specification

Model No.	SST-50-08	SST-100-08	SST-150-08	SST-200-08
Solar Panel	Type :	Polycrystalline Silicon	Polycrystalline Silicon	Polycrystalline Silicon
	Power:	18V 75W	18V 90W	18V 120W
	Dimension (mm) :	525 * 348 mm	870*670 mm	1140*670 mm
	Conversion Efficiency:	19.8%	19.8%	19.8%
Battery Pack	Type :	LiFe PO4	LiFe PO4	LiFe PO4
	Capacity :	12.8V 24AH	12.8V 30AH	12.8V 36AH
	Battery Energy:	307.2 WH	384WH	460.8WH
	Full-charged Time :	5 hours (at enough sunshine)	5 hours (at enough sunshine)	4.5hours (at enough sunshine)
LED Street Lamp	Light Source :	192pcs of CREE brand chips	192pcs of CREE brand chips SMD3030	192pcs of CREE brand chips SMD3030
	Total Lumen of Lamp :	About 3000LM	About 5000LM	About 6500LM
	Lamp Dimension(mm):	515*253*455 mm	515*253*455 mm	515*253*455 mm
	CRI :	>70		
	Color Temperature:	3000K/4000K/5000K/5700K/6500K		
	Housing Material	die-cast aluminium		
Controller	Type :	PWM/MPPT		
	Charging Efficiency :	>90%		
Working Mode	With light sensor			
	With microwave sensor			
	With time control			
Supports Continous Rainy Days	3 days	3 days	3 days	3 days
Installation Height	4-5 meters	5-7 meters	6-7 meters	7-8 meters
IP Rating	IP65	IP65	IP65	IP65
Warranty	3 Years	3 Years	3 Years	3 Years

SST-01 Series



Separate type Solar LED Street Light

- High quality level , suitable for city high way projects
- More flexible installation
- Intelligent control , supports 2 rainy days
- High lumen efficiency , more energy-saving, cost effective



40W/50W/60W

80W/100W/120W

Specification

Model No.	SST-40-01	SST-50-01	SST-60-01	SST-80-01	SST-100-01	SST-120-01	
Solar Panel	Type :	Polycrystalline Silicon	Polycrystalline Silicon	Polycrystalline Silicon	Polycrystalline Silicon	Polycrystalline Silicon	
	Power:	18V 60W	18V 80W	18V 90W	18V 100W	18V 100W	18V 120W
	Dimension (mm) :	610*670*30 mm	670*780*30 mm	870*670*35 mm	1000*670*35 mm	1000*670*35 mm	1140*670*35 mm
	Conversion Efficiency:	19.7-19.8%	19.7-19.8%	19.7-19.8%	19.7-19.8%	19.7-19.8%	19.7-19.8%
Battery Pack	Type :	LiFe PO4	LiFe PO4	LiFe PO4	LiFe PO4	LiFe PO4	LiFe PO4
	Capacity :	12.8V 24AH	12.8V 24AH	12.8V 24AH	12.8V 36AH	12.8V 48AH	12.8V 48AH
	Battery Energy:	307.2WH	307.2WH	307.2WH	460.8 WH	614.4 WH	614.4WH
	Full-charged Time :	5.7 hours (at enough sunshine)	4.3 hours (at enough sunshine)	3.8 hours (at enough sunshine)	5.2 hours (at enough sunshine)	6.9 hours (at enough sunshine)	5.7 hours (at enough sunshine)
LED Street Lamp	Light Source :	60pcs of CREE brand chips SMD3030	60pcs of CREE brand chips SMD3030	60pcs of CREE brand chips SMD3030	120pcs of CREE brand chips SMD3030	120pcs of CREE brand chips SMD3030	120pcs of CREE brand chips SMD3030
	Total Lumen :	about 4200LM	about 4200LM	about 4200LM	about 6400LM	about 8400 LM	about 8400LM
	Lamp Dimension(mm):	500*210*85 mm	500*210*85 mm	500*210*85 mm	600*255*100 mm	600*255*100 mm	600*255*100 mm
	CRI :	>70					
	Color Temperature:	3000K/4000K/5000K/5700K/6500K					
Controller	Housing Color	Grey					
	Type :	PWM/MPPT					
	Charging Efficiency :	>90%					
Working Mode	With microwave sensor						
	With time control						
Supports Continuous Rainy Days	2 days	2 days	2 days	2 days	2 days	2 days	
Installation Height	4-5 meters	5-6 meters	5-6 meters	6-7 meters	7-8 meters	7-9 meters	
IP Rating	IP65	IP65	IP65	IP65	IP65	IP65	
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years	

GL-03 Series

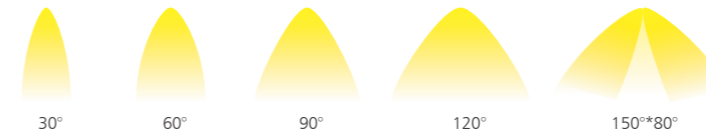


New competitive LED Garden Light 100W

- Beautiful design , 20-100Watt range
- With 3 types of brackets , to meet the needs of different customers
- Up to 140lm/w, high brightness
- Beam Angle : 5 Options : 30°/60°/90°/ 120°/ 150°*80°
- With 5mm thick super White tempered glass cover
- To fit poles whose diameter is 76mm-60mm
- Application :Garden, Yard, Road, Street, Park, landscape lighting etc.



Beam angles available



Specification

Model No.	GL-20W-03	GL-50W-03	GL-100W-03
Power Watt	20Watt	50Watt	100Watt
Product dimension(mm)	D380*H429(Double bracket) / D380*H476.6(Single bracket) / L463*W380*H198(Ajustable adaptor)		
LM/W	150-160 lm/w	140-150 lm/w	130-140 lm/w
Light source	144pcs of Epistar SMD3030 chips		
Lens beam angle	30° / 60° / 90° / 120° / 150°*80°		
CRI	>70		
Color temperature	3000K , 4000K , 5000K , 5700K ,6500K		
IP Rating	IP66		
Input voltage	85-265VAC		
Power factor	>0.95		
THD	<15%		
Surge protection level	4KV (without SPD), With 10KV/20KV SPD is suggested		
Other functions options	Can be dimmable		

GL-02 Series

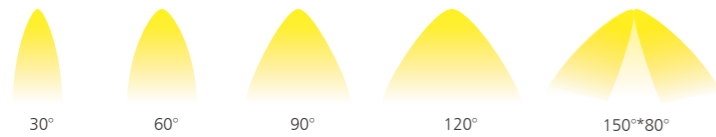


Elegant LED Garden Light 150W

- Beautiful design , 30-150Watt range
- With 3 types of brackets , to meet the needs of different customers
- Up to 140lm/w, high brightness
- Beam Angle : 5 Options : 30°/60°/90°/ 120°/ 150°*80°
- With 5mm thick super White tempered glass cover
- To fit poles whose diameter is 76mm-60mm
- Application :Garden, Yard, Road, Street, Park, landscape lighting etc.



Beam angles available



Specification

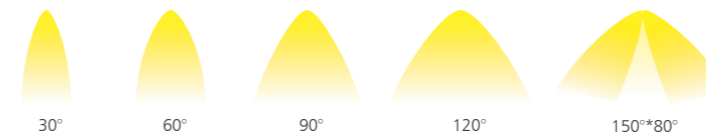
Model No.	GL-50W-02	GL-100W-02	GL-150W-02
Power Watt	50Watt	100Watt	150Watt
Product dimension(mm)	D423*H485.79(Double bracket) / D423*H486.09(Single bracket) / (L)506*(W)423*(H)207.5(Ajustable adaptor)		
LM/W	150-160 lm/w	140-150 lm/w	130-140 lm/w
Light source	256pcs of Epistar SMD3030 chips		
Lens beam angle	30° / 60° / 90° / 120°/ 150°*80°		
CRI	>70		
Color temperature	3000K , 4000K , 5000K , 5700K ,6500K		
IP Rating	IP66		
Input voltage	85-265VAC		
Power factor	>0.95		
THD	<15%		
Surge protection level	4KV (without SPD), With 10KV/20KV SPD is suggested		
Other functions options	Can be dimmable		

GL-01 Series



150LM/W High-end LED Garden Light

- It's a very competitive model (with best ratio of quality/price) , comparing with the other models in market
- Pure die-casting aluminum housing , good quality painting
- Elegant style , Nice design
- 50-200watt available , 150lm/w in average
- Beam Angle : 4 Options : 30°/60°/90°/ 120°/ 150°*80°
- With super White tempered glass cover whose light-transmittance is a lot higher than normal green glass , ensure higher LM/W.
- To fit poles whose diameter is 76mm-60mm.
- Application :Garden, Yard, Road, Street, Park, landscape lighting etc.



Specification

Model No.	GL-50W-01	GL-100W-01	GL-150W-01
Power Watt	50Watt	100Watt	150Watt
Product dimension	D451.5 * H501.84mm	D451.5 * H501.84mm	D451.5 * H501.84mm
LM/W	about 160 lm/w	about 150 lm/w	130-140 lm/w
Light source	288pcs of Epistar SMD3030 chips		
Lens beam angle	30°/60°/90°/ 120°/ 150°*80°		
CRI	>70		
Color temperature	3000K , 4000K , 5000K , 5700K ,6500K		
IP Rating	IP66		
Input voltage	100-305VAC		
Power factor	>0.95		
Driver efficiency	>90%		
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested		
Other functions options	Can be dimmable		

TP-NS04 Series



IP65 Linkable Aluminum LED Tri-proof Light

- Seamless connectability with IP65 & IK08 protection
- Customized length acceptable: 2-12'inches
- Surface mounting with hidden back wiring and brackets design
- Super higher power solution supportable (eg. 150W&8FT@20,000lm)
- Linking 600W max@ 230V on dimmablemode with one input, suitable for 0-10V, DALI dimming
- Build-in Manual-test/Self-test/DALI-2 emergency kits of LiFeP04 as option
- Application: underground parking , warehouse, workshop etc.



Specification

Model No.	TP-20W-NS04	TP-40W-NS04	TP-50W-NS04	TP-60W-NS04
Power Watt	20W	40W	50W	60W
Dimension (mm)	600*80*58mm	1200*80*58mm	1500*80*58mm	1500*80*58mm
Light source	171pcs of Epistar SMD 2835	266pcs of Epistar SMD 2835	342pcs of Epistar SMD 2835	342pcs of Epistar SMD 2835
Lens beam angle	120°			
LM/W	about 130 lm/w			
CRI	>80			
Color temperature	3000K , 4000K , 5000K , 5700K, 6500K			
IP Rating	IP65			
Input voltage	220-240VAC			
Power factor	>0.95			
Driver efficiency	>90%			
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested			
Other functions options	Can be dimmable			

LED Sports lights projects show



Football field used PENEL 1500W sports lights in 2025 in Lebanon



Padel courts used PENEL 150W Sports lights in 2024 in Uruguay



Football field installing PENEL 500W Sports lights in 2024 in China



New tennis court used PENEL 250W LED Sports lights in 2024 in Italy



Big Soccer field used PENEL 1000W Sports lights in 2023 in Azerbaijan



ATP250 again used our 250W LED Sports lights in 2023 in Argentina



Soccer field used PENEL 250W Sports lights in 2023 in Uruguay



A Harbour used PENEL 1000W Sports lights in 2023 in Spain



Swimming pool used PENEL 1000W Sports lights in 2022 in Philippines



Hockey field used PENEL 250W Sports lights in 2022 in Argentina



New Water Park used PENEL 960W Sports lights in 2022 in Saudi Arabia



New Big soccer field used PENEL 1200W Sports lights in 2021 in Czech

Solar LED Street lights projects show



City streets used PENEL Solar streetlights 60w with 6m height in 2025 in Vietnam



Streets used PENEL Solar streetlights with 9m height in 2024 in Indonesia



Construction site used PENEL Solar lights with 8m height in 2024 in the Philippines



PENEL Integrated Solar streetlights were replacing the old lamps in 2023 in Indonesia



PENEL Integrated Solar streetlights were installed in 2023 in Korea



Sports field used PENEL Solar lights in 2023 in Panama



PENEL Integrated Solar Streetlights were lighting up at night in 2022 in Indonesia



PENEL Integrated Solar streetlights were illuminating a villa area under construction in 2022 in Indonesia



A large mall parking lot used PENEL integrated Solar streetlights with 30 feet pole in 2022 in USA

LED High Bay lights and AC Streetlights projects show



PENEL 200W/100W LED High Bay lights were illuminating a Quilmes beer warehouse in 2024 in Argentina.



PENEL 150W LED High Bay lights were illuminating a warehouse at 14m height in 2023 in Indonesia



PENEL 150W LED High Bay lights were illuminating a car showroom in 2023 in Chile



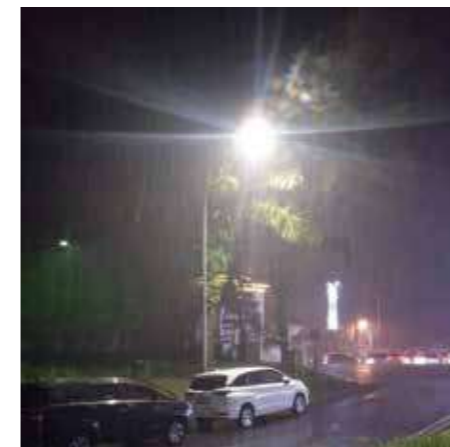
PENEL 200W LED High Bay lights were illuminating a warehouse in 2023 in Nigeria



PENEL 150W LED High Bay lights were illuminating a workshop in 2023 in Indonesia



PENEL 150W LED High Bay lights were illuminating the fire protection district of Civil aviation administration in 2022 in Pakistan



PENEL 100W LED Street lights were illuminating the rainy streets in 2025 in Indonesia



PENEL LED Street lights were illuminating a park beside the La milita lake in Buenos Aires province in 2024 in Argentina.



(Before/After):PENEL LED Street lights significantly improved the road lighting in San Juan province beside the Andes mountains in 2024 in Argentina