



Shenzhen Penel Optoelectronics Technology Co.,Ltd 深圳市派乐光电技术有限公司



www.penel.cc

### About Us

Shenzhen Penel Optoelectronics Technology Co.,Ltd (manufacturer registered in Shenzhen, China mainland), and Penel Optoelectronics Technology Co.,Ltd (company registered in Hongkong) are the same one company---We were founded in 2006. Through 17 years of hard work and continuous innovation, now we have been a leading high-tech enterprise in Shenzhen LED lighting industry, specializ ed in R&D, producing and marketing high quality outdoor LED lighting products.

Our products line include :High power LED Sports lights , AC and Solar led Street lights, LED High Bay lgihts, Garden lights . All of the products are TUV GS , CB, CE & ROHS approved ,with 5 years warranty. 100% of our products are exported. With 17 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 yeare 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 continuely 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.

Continuely offering great value to customers make sure our sustainable development. Welcome to visit us in Shenzhen !



# **Factory Pictures**













### R&D and QC



### **Production Devices**











#### PENEL Team

As the founder of PENEL , Mr.Wei is also a senior R&D engineer and electric engineer with 18 years' experiences, responsible for the R&D of the new products.

Since he is an engineer , Mr.Wei has the Craftsman's spirit, focus on the details and reliability of products , trying to do the best on : safety , waterproof , heat dissipation, lumen output, light distribution, etc .

At the same time , he pays close attention to the new technology of the led industry , and the new needs of our customers , developing the best ratio of quality/price for customers .

All these made the culture of our factory : Honestly , Seriously do our work well , no fake , no exaggerated.



Jenny Zeng

Michael Wei

CEO, R&D Director

Phone: +86-13926520423 Email : wjm@penel.cc

Marketing Director

Phone: +86-18926077150 Email: jenny@penel.cc With 15 years' experiences of serving overseas markets, Jenny knows very well what overseas customers care, and knows how to help them to solve their problems. It's continuously creating more values to customers that makes our sustainable development.



**Jun Hua** *Quality Assurance Engineer* 

Phone:+86-18270881058

Quality is our life . From IQC (incoming raw materials check), to IPQC (quality check during production process), to FQC (Final quality check), we're running a complete quality management system, this is why Mr.Hua and his team always can make sure each process in good control . As a young man, he always devotes 100% enthusiasm to the quality work as he loves quality work . He is careful and reliable .

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Xingyu Mou Production Manager

Phone:+86-18702731015

As a modern factory, we own not only advanced modern machines , but also mature process system, and excellent management . No doubt Mr.Mou is an excellent manager and with him everything is in good order . He doesn't talk too much but every one in PENEL trust him , with him , our sales can promise accurate delivery time to customers .

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Lihong Chen Purchasing

Phone:+86-13360056451

Purchasing is not only purchasing , it means good communication with suppliers to solve all kinds of problems , and to get the best competitive costs & quality from suppliers . No doubt Miss Chen has been doing a wonderful work and has ensured our stable supply . She is amazing .



**Mengyao Li** Test Engineer

Phone:+86-13774000700

Mr.Li is very experienced in operating all of our test devices : EMI receiver , surge generator , hip top tester , photometer etc. Testing , recording , comparing , evaluating ...he is always busy but always a reliable person in PENEL .

### **PENEL** Team



\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

**Qiuli Wu** Accountant

As a legally operated factory, we keep healthy in finance and have clear account details. Miss Wu is very careful and responsible with her work, so we're grade A customer for all of our suppliers on paying, and we're always honest with our employees and customers. A healthy finance can ensure us grow up more stably.



**Cindy Wang** 



**Fanny Huang** 



**Emily Zhou** 



Cassie Liao



**Cindy Zhao** 



Kate Fang



Yoyo Yang



Wendy Gao

#### PENEL overseas sales team

With 3-10 years' experiences in led industry, they're professional partners for worldwide customers. From analyzing and comparing the details of different products, to designing the best optimized lighting solutions by simulation for different application, they are capable to solve all kinds of problems for customers in sports field lighting , public lighting , and industrial lighting . For PENEL team, creating value for customers are our value .



# **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.

Various of beam angles avilable: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 fileds such as Soccer field, Hockey field, Tennis court, Basketball court, Rugby field, Baseball field, Golf course etc, Tunnel, Park, Garden, Fishing-boats etc.

120

LED Chip Brand

30°\*90°

120°\*50°





250W

500W





1000W





#### Specification

15

**Driver Brand** 

Beam angles available

• With integrated anti-glare shield

<u>/////</u>

60

90

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°/12	0°*50°/30°*90°/Type	e II Medium / Type III	Medium
LM/W			135lm/w in a	verage with 432 chips	s /module	
CRI		>70 or >80 or >90				
Color temperature			3000K , 40	00K , 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 (V	Vithout SPD); With 1	0KV/20KV SPD is sug	gested

CREE 🔶

Type II Medium Type III Medium



# **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.







500W/module

800-1000W



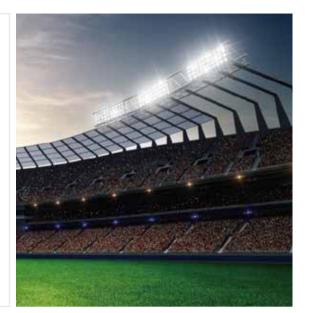
1200-1500W

1600-2000W

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**



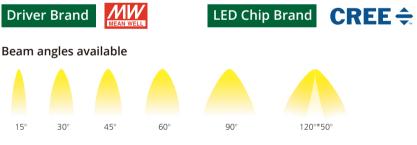


CB 🔞 🗗

IP66 Syears

# 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







250W/module

400-600W



750-900W

1000-1200W

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 (V	Without SPD); With 10KV/20KV	SPD is suggested



# **FL-NS07S Series**





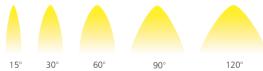
# **High Lumens LED Sports Light**

- 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





# Driver Brand LED Chip Brand CREE Beam angles available Image: Comparison of the second seco



Small size 100~180W Medium size

Medium size 250W/Module Large size

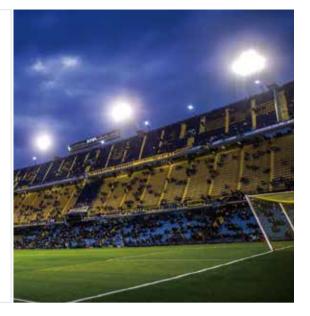
500W/Module

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, L	ine-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 to1000Watt
- 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







300W





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		3000К , 4000К , 5000К , 5700К, 6500К				
IP Rating	IP66					
Input voltage	100-305VAC					
Power factor	>0.95					
Driver efficiency	>90%					
Surge protection level	L	ine-Earth 6KV, Line-Line	4KV (Without SPD); With	10KV/20KV SPD is sugges	sted	



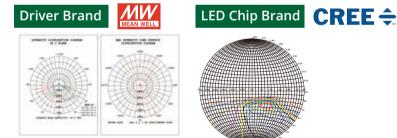






# Popular LED Street Light with Toolless Maintenance

- 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.



- 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°	1	
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 ad	ld light sensor(photocell sensor) Timing Dimi	ming	







# **STL-NS09 Series**





# 160LM/W High Performance LED Street Light

LED Chip Brand

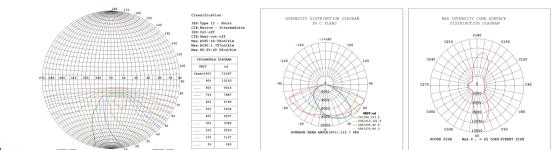
- High lumen efficiency up to 160LM/W
- With 5mm thick transparent tempered glass, avoid lens getting yellow
- Strong structure , enough to resist typhoon and hail
- Private design, modern looking, super durability







200-250W



#### **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°*8	0°		
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		

CREE 🚖



# **STL-NS10** Series



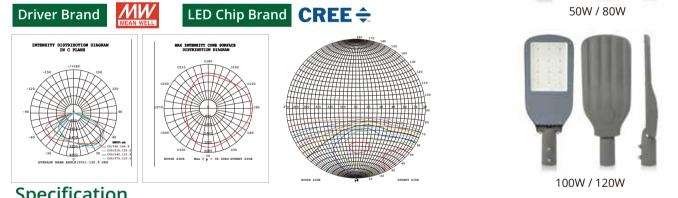


# **NEW Design Fashionable** LED Street Light

• 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.





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°*8	30°	
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(photocel	l sensor) Timing Dimming	



### STL-N07 Series





# New Modular LED Street Light

• Big, Solid, Strong deisgn

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

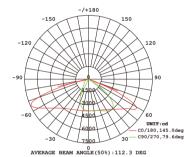


150W



LED Chip Brand CREE 🚖

200W







#### 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	4*48pcs/module	5*48pcs/module	6*48pcs/module	7*48pcs/module	
	144pcs Philips chip	192pcs Philips chip	240pcs Philips chip	288pcs Philips chip	366pcs Philips chip	
Beam Angle		145°x63°				
LM/W		about 138 LM/W				
CRI	>80 or >90					
Color temperature	3000K,4000K,5000K,6000K					
IP Rating		IP66				
Input voitage		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 10	vi style="text-decoration-color: blue;" style="text-decoration-color: blue;"/ style="text-decoration-color: blue;" style="text-decoration-color: blue;"/	d	
Other function options		Can add light ser	nsor(photocell sensor) Tir	ning Dimming		

240W



# **STL-NS08** Series

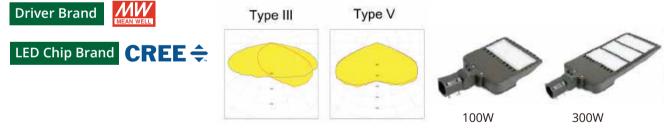




# Shoebox LED Street Light

- High luminous efficiency, up to 130LM/W
- High quality PC material lens, type Ill, 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 disspation, at the same time, reducing the windward ares
- Meanwell driver, high reliability, 3 in 1 dimming (1~10Vdc or 10V PWM singnal or resistance)
- Four types installation kits. Lamp can be mounted on round/square poles, walls, brackets



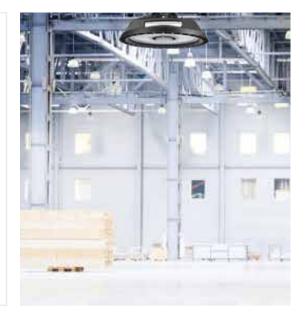


Model No.	STL-100W-NS08 STL-200W-NS08 STL-300W-NS08				
Model No.	512-10000-10508	512-2000-14508	512-50000-14508		
Power Watt	100Watt	200Watt	300Watt		
Product dimension	311*310*84mm	438*310*68mm	600*308*68mm		
Light source	1*144pcs/module(144pcs Cree chips)	2*144pcs/module(288pcs Cree chips)	3*144pcs/module(432pcs 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 voitage	100-305VAC				
Power factor	>0.95				
Dirver efficiency	>93%				
Surge protection level	Line-Earth 6KV, Line-Line 4KV (Without SPD); With 10KV/20KV SPD is suggested				
Other function options	Can ad	d light sensor(photocell sensor) Timing I	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 avaliable

**Driver Brand** 

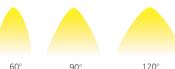
Specification

• Application :Warehouse, Workshop, Factory, underground parking garage, Port and pier, Exhibition center, Refrigeration storage, Library, Railway station, Gas station, Auditorium, etc





#### Beam angles available



Specification		60°	90° 120°	
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	3000К , 4000К , 5000К , 5700К, 6500К			
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	Ca	n be dimmable , can be with microwave s	sensor	



# HBL-NS07 Series



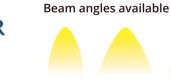


# 140LM/W Circular LED High Bay Light

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



LED Chip Brand EPISTAR



60°

90°

120°



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 avaliable
- Very good choice for industrial lighting like warehouse, workshop,factory, gas station etc



Beam angles available

90°

120°

60°





Model No.	HBL-100W-NS03	HBL-200W-NS03				
Power Watt	100Watt	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	Са	n be dimmable , can be with microwave s	ensor			

#### **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.

#### Monocrystalline **PV** Panel silicon





CREE 🚖

LED Brand



Specification		Configur (MPPT controller) for city			ration B secondary roads /villages	
		SST-50-09A	SST-100-09A	SST-50-09B	SST-100-09B	
	Type :	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon	
Solar Panel	Power:	18V 60W	18V 90W	4.5V 60W	4.5V 90W	
Solar Parlei	Dimension (mm) :	664*435 mm	994*435 mm	664*435 mm	994*435 mm	
	Conversion efficiency:	22%	22%	22%	22%	
	Type :	LiFe PO4	LiFe PO4	LiFe PO4	LiFe PO4	
	Capacity :	3.2V 60AH	3.2V 90AH	3.2V 60AH	3.2V 90AH	
	Battery Energy:	192 WH	288 WH	192 WH	288 WH	
	Full-charged time :	4 hours (at enough sunshine)	4 hours (at enough sunshine)	4 hours (at enough sunshine)	4 hours (at enough sunshine)	
-	Light source :	80pcs of High lumen	160pcs of High lumen	80pcs of High lumen	160pcs of High lumen	
		chips SMD5050	chips SMD5050	chips SMD5050	chips SMD5050	
	Total lumen of lamp :	About 4500LM	About 6700LM	About 3400LM	About 4600LM	
LED Street Lamp	Lamp dimension(mm):	672.4*445*183 mm	1002.4*445*183 mm	672.4*445*183 mm	1002.4*445*183 mm	
	CRI :	>7	0	>7	70	
	Color temperature:	3000K/4000K/500	0K/5700K/6500K	570	)0К	
	Housing Material	Die-casting	aluminum	Die-casting aluminum		
	Housing Color	Gre	ρy	Grey		
Controller	Type :	3.2V MPPT indepe	ndent controller	PW	/M	
		With light sensor: light-off when sunrise,		With light sensor:		
		light-up wh	en sunset	light-off when sunrise, light-up when sunset		
Working Mode		With microwave s	ensor( optional)			
		With time	control	With time control		
Supports Continous Rainy Days		3 days	3 days	3 days	3 days	
Installa	tion Height	5-6 meters	6-7 meters	4-5 meters	5-6 meters	
IP	Rating	IP65	IP65	IP65	IP65	
Wa	arranty	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
- Monocystalline silicon solar penel , 22% conversion efficiency
- Intelligent control, supports 3 rainy days

Monocrystalline silicon

#### Battery Pack LiFePo4



CREE 🚖





LED Brand



#### **PV Panel Specification**

Model No.		SST-50-02N	SST-100	-02N	SST-150-02N	SST-200-02N	SST-250-02N	
	Type :	Monocrystalline Silicon	Monocrystalli	ne Silicon	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon	
Solar Panel	Power:	18V 30W	18V 45	W	18V 68W	18V 90W	18V 120W	
	Dimension (mm) :	525 * 348 mm	770*3	48	960*393	1130*420	990*650	
	Conversion efficiency:	22%	22%		22%	22%	22%	
	Type :	LiFe PO4	LiFe PC	)4	LiFe PO4	LiFe PO4	LiFe PO4	
	Capacity :	12.8V 12AH	12.8V 18	3AH	12.8V 24AH	12.8V 30AH	12.8V 42AH	
Battery Pack	Battery Energy:	153.6 WH	230.4V	/H	307WH	384WH	537.6WH	
	Full-charged time :	6 hours (at enough sunshine)	6 hours (at enou	gh sunshine)	5 hours (at enough sunshine	5 hours (at enough sunshine)	5 hours (at enough sunshine)	
	Light source :	64pcs of CREE brand	128pcs of CR	EE brand	192pcs of CREE brand	256pcs of CREE brand	384pcs of CREE brand	
		chips SMD3030	chips SMD	3030	chips SMD3030	chips SMD3030	chips SMD3030	
	Total lumen of lamp :	About 3000LM	About 500	DOLM	About 6500LM	About 8000LM	About 10000LM	
LED Street Lamp	Lamp dimension(mm):	550*373*155	795*373	*155	985*418*155	1155*445*155	1013*680*155	
LED Street Lamp	CRI :	>70						
	Color temperature:	3000K/4000K/5000K/6500K						
	Housing Material	die-cast aluminium						
	Housing Color	Grey						
Controller	Type :	PWM						
controller	Charging efficiency :				90%			
		With light sensor						
Working Mode		With microwave sensor						
					With time control			
Supports Cont	tinous Rainy Days	3 days		3	3 days	3 days	3 days	
Installa	tion Height	4-5 mete	ers	5-7	7 meters	6-7 meters	8-10 meters	
IP	Rating	IP65			IP65	IP65	IP65	
Wa	irranty	3 Years	5	Э	3 Years	3 Years	3 Years	







#### 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.



Monocrystalline silicon





LED Brand



CREE 🔶

Specification

Model No.		SST-50-07	SST-100-07	SST-150-07			
	Type :	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon			
	Power:	4V 30W	5V 40W	4V 60W			
Solar Panel	Dimension (mm) :	502.4x340mm	672.4*340	1002.4*340			
	Type :	LiFe PO4	LiFe PO4	LiFe PO4			
	Capacity :	3.2V 24AH	3.2V 30AH	3.2V 36AH			
	Battery Energy:	76.8WH	96WH	115.2WH			
Battery Pack	Full-charged time :	around 3.2h (with enough sunshine)	around 3h (with enough sunshine)	around 3h (with enough sunshine)			
	Light source :	28pcs of high-lumen	60pcs of high-lumen	100pcs of high-lumen			
	Total Lumen :	SMD3030 chips	SMD5050 chips	SMD3030 chips			
		about 2500LM	about 3500LM	about 5500LM			
	CRI :	>70	>70	>70			
LED Street Lamp	Color temperature:	7000K	7000K	7000K			
LED Street Lamp	Housing Material	Pure aluminum extrusion profiles					
	Housing Color	Silver					
Co	ntroller	Т	The controller circuit is integrated in PCB				
Wor	king Mode	Light control + Time control					
Supports Continous Rainy Days Installation Height			3 days				
		4-5 meters	4-5 meters	5-6 meters			
IP	Rating	IP65	IP65	IP65			
W	arranty	3 Years	3 Years	3 Years			





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### **SST-08 Series**





### New All-in-two Solar LED Street Light

- PV Panel is 360° adjustable to maxmize 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



#### PV Panel Pol

Polycrystalline silicon

#### Battery Pack LiFePo4



Model No.		SST-50-08	SST-100-08	SST-150-08	SST-200-08		
	Type :	Polycrystalline Silicon	Polycrystalline Silicon	Polycrystalline Silicon	Polycrystalline Silicon		
Solar Panel	Power:	18V 75W	18V 90W	18V 120W	18V 150W		
	Dimension (mm) :	525 * 348 mm	870*670	1140*670	1470*670		
	Conversion Efficiency:	19.8%	19.8%	19.8%	19.8%		
	Type :	LiFe PO4	LiFe PO4	LiFe PO4	LiFe PO4		
	Capacity :	12.8V 24AH	12.8V 30AH	12.8V 36AH	12.8V 42AH		
Battery Pack	Battery Energy:	307.2 WH	384WH	460.8WH	537.6WH		
	Full-charged Time :	5 hours (at enough sunshine)	5 hours (at enough sunshine)	4.5hours (at enough sunshine)	4 hours (at enough sunshine		
	Light Source :	192pcs of CREE	192pcs of CREE brand	192pcs of CREE brand	192pcs of CREE brand		
		brand chips	chips SMD3030	chips SMD3030	chips SMD3030		
LED Street Lamp	Total Lumen of Lamp :	About 3000LM	About 5000LM	About 6500LM	About 8000LM		
	Lamp Dimension(mm):	515*253*455	515*253*455	515*253*455	515*253*455		
LED Street Lump	CRI :	>70					
	Color Temperature:	3000K/4000K/5000K/5700K/6500K					
	Housing Material	die-cast aluminium					
	Housing Color	Grey					
Controller	Type :	PWM/MPPT					
controller	Charging Efficiency :	>90%					
		With light sensor					
Working Mode		With microwave sensor					
		With time control					
Supports Cont	tinous Rainy Days	3 days	3 days	3 days	3 days		
Installa	tion Height	4-5 meters	5-7 meters	6-7 meters	7-8 meters		
IP	Rating	IP65	IP65	IP65	IP65		
Wa	rranty	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

silicon

Polycrystalline





LED Brand



### Specification

**PV** Panel

Model No.		SST-40-01	SST-50-01	SST-60-01	SST-80-01	SST-100-01	SST-120-01	
	Type :	Polycrystalline Silicon	Polycrystalline Silicon			Polycrystalline Silicon		
	Power:	18V 60W	18V 80W	18V 90W	18V 100W	18V 100W	18V 120W	
Solar Panel	Dimension (mm) :	610*670*30	670*780*30	870*670*35	1000*670*35	1000*670*35	1140*670*35	
	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%	
	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 Pack	Battery Energy:	307.2WH	307.2WH	307.2WH	460.8 WH	614.4 WH	614.4WH	
	Full-charged Time :	5.7 hours (at enough	4.3 hours (at enough	3.8 hours (at enough	5.2 hours (at enough	6.9 hours (at enough	5.7 hours (at enough	
		sunshine)	sunshine)	sunshine)	sunshine)	sunshine)	sunshine)	
	Light Source :	60pcs of CREE brand	60pcs of CREE brand	60pcs of CREE brand	120pcs of CREE brand	120pcs of CREE brand	120pcs of CREE branc	
LED Street Lamp		chips SMD3030	chips SMD3030	chips SMD3030	chips SMD3030	chips SMD3030	chips SMD3030	
	Total Lumen :	about 4200LM	about 4200LM	about 4200LM	about 6400LM	about 8400 LM	about 8400LM	
	Lamp Dimension(mm):	500*210*85	500*210*85	500*210*85	600*255*100	600*255*100	600*255*100	
	CRI :	>70						
	Color Temperature:	3000K/4000K/5000K/5700K/6500K						
	Housing Material	die-cast aluminium						
Controller	Housing Color	Grey						
controller	Type :	PWM/MPPT						
	Charging Efficiency :			>90	1%			
Working Mode		With microwave sensor						
working wode		With time control						
Supports Con	tinous Rainy Days	2 days 2 days 2 days 2 days 2 d				2 days		
Installa	tion Height	4-5 meters 5-6 meters 5-6 meters 6-7 meters 7-8 meters 7-9 met				7-9 meters		
IP	Rating	IP65 IP65 IP65 IP65 IP65 IP65					IP65	
Wa	Warranty 3 Years 3 Years 3 Years 3 Years				3 Years			



### **SST-04 Series**





## Separate Type Solar LED Street Light

- High quality level , suitable for city high way projects
- More flexible installation
- Strong , Solid , Enough to resist typhoon and hail
- High lumen efficiency , more energy-saving, cost effective





PV Panel

Polycrystalline silicon





Model No.		SST-80-04	SST-150-04		
	Type :	Polycrystalline Silicon	Polycrystalline Silicon		
Solar Panel	Power:	18V 90W	18V 120W		
Solar Parler	Dimension (mm) :	870*670*35	1140*670*35		
	Conversion efficiency:	19.7-19.8%	19.7-19.8%		
	Type :	LiFe PO4	LiFe PO4		
	Capacity :	12.8V 24AH	12.8V 42AH		
Battery Pack	Battery Energy:	307.2WH	537.6WH		
	Full-charged time :	4 hours (at enough sunshine)	5 hours (at enough sunshine)		
LED Street Lamp	Light source :	192pcs of CREE brand chips SMD3030	320pcs of CREE brand chips SMD3030		
	Total lumen of lamp :	About 6000LM	About 10000LM		
	Lamp dimension(mm):	473.5*212.7*85mm	563*273*85mm		
	CRI :	>70			
	Color temperature:	3000K/4000K/5000K/5700K/6500K			
	Housing Material:	die-cast aluminium			
	Housing Color:	Black			
Controller	Type :	PWM			
Controller	Charging efficiency :	9	0%		
		With light sensor			
Working Mode		With micro	wave sensor		
0		With time control			
Supports Con	tinous Rainy Days	2 days	2 days		
Installa	ation Height	6-7 meters	7-9 meters		
IP	Rating	IP65	IP65		
Wa	arranty	3 Years	3 Years		

### **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°x80°
- 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.



#### Beam angles available

specification	30°	60° 90° 12	0° 150°*80°			
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 connectablity 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@20,0001m)
- 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.





#### LED Chip Brand EPISTAR Driver Brand PHILIPS

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		12	0°			
LM/W	about 130 lm/w					
CRI	>80					
Color temperature	3000К , 4000К , 5000К , 5700К, 6500К					
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 d	immable			

#### **Projects Show**



#### Feb, 2023 in Argentina

"Cordoba Open" of ATP250 (International Tennis Match World Tour) in cordoba, Argentina, again used PENEL LED Sports lights (Model:FL-250W -NS07M) with excellent lighting effect. Since 2019, PENEL lighting fixtures have been used in this world-class competition for 5 consecutive years.



#### Aug, 2023 in Uruguay

PENEL LED Sports lights (Model:FL-250W-NS07M) were used for a big project ( 9 soccer fields complex) , with perfect lighting effect : very bright and uniform.



#### July, 2022 in Philippines

PENEL sports lights (Model:FL-1000W-NS07M) were used in a professional swimming pool in Philippines. The lighting effect (average lux, uniformity, GR)completely reached the FINA (Federation International Nation Assosiation) standards.



#### Sep, 2022 in Argentina

PENEL 250W LED Sports lights (Model No. FL-250W-NS07M) were installed in a hockey field.From the photos provided by customer ,the lighting effect is very good , very bright , and with perfect uniformity.



#### Sep, 2021 in Czech

PENEL sports lights 1200watt (Model:FL-1200W-NS07M) 220units, were being installed in the Biggest soccer filed in Czech. The lighting effect (average lux, uniformity,GR) all have reached and even surpassed the UEFA illuminance level A.



#### Sep, 2021 in Italy

PENEL Sports lights(Model:FL-250W-NS07M) were used in a basketball court in Italy , customer used the 30° beam angle and con[]rm the lighting effect is perfect.



#### Feb, 2022 in Pakistan

PENEL 150w High bay light (model :HBL-150W-NS03) were used in the fire protection district of Civil aviation administration in Pakistan, with a perfect lighting effect.



#### Aug, 2023 in Chile

PENEL 150w High bay light (model: HBL-150W-NS06) were used in a car showroom in Chile with wonderful illumination.



#### July, 2023 in Panama

PENEL Solar led streetlight (model:SST-04) were used in Panama . Customer sent the photos . It looks very bright and customer is very satisfied.



www.penel.cc



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