

SOKOYO[®]



AVANDA

KY-F-XY Version 2022 1.0

LED SOLAR OUTDOOR STREET LIGHTS



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KY-F-XY DC

Reasonable structural design, streamlined shape, very aesthetic;

Patented appearance design, high-quality die-casting structure design to achieve sturdy structure, modular design of light source, easy installation and maintenance, convenient installation and disassembly;

The circuit connection is plug-and-pull and easy to maintain; the unique heat dissipation design ensures that the light source is at the best working temperature; the surface electrostatic spraying treatment has strong corrosion resistance;

The bat-wing light distribution design is adopted to provide uniform light distribution, and high-quality chips are used, with less light decay and durability;

Humanized design concept, light, convenient, easy to install and maintain; widely used in any outdoor lighting places such as roads, squares, scenic spots, etc.;

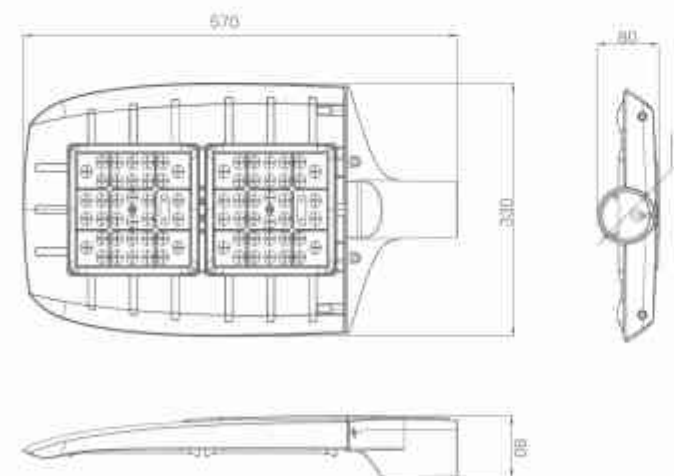
Appearance Patent Number:202230132970.2



TECHNICAL PARAMETER

Product Models	KY-F-XY-001	KY-F-XY-002	KY-F-XY-003
Rated Power	60W	60W	80W
Light Source	DC12V/24V	DC24V	DC24V
Lithium Battery	12.8V/42AH	12.8V/60AH	25.6V/42AH
Solar Panel	Monocrystalline:18V/120W	Monocrystalline:15V/180W	Monocrystalline:36V/180W
Type of Light Source	3030/5050/7070	3030/5050/7070	3030/5050/7070
Light Distribution Type	Bat-Wing light distribution(150°x65°)	Bat-Wing light distribution(150°x65°)	Bat-Wing light distribution(150°x65°)
Light Efficiency	>150LM/W	>150LM/W	>150LM/W
Color Temperature	3000K/4000K/5700K/6500K	3000K/4000K/5700K/6500K	3000K/4000K/5700K/6500K
CRI	>Ra70	>Ra70	>Ra70
IP Grade	IP65	IP65	IP65
IK Grade	IK08	IK08	IK08
Working Temperature	-10℃~+60℃	-10℃~+60℃	-10℃~+60℃
Working Humidity	10%~90%	10%~90%	10%~90%
LED Lifespan	>50000H	>50000H	>50000H
Controller	10A	15A	15A
Mounting Diameter	φ60mm	φ60mm	φ60mm
Lamp Dimension	570 x 330 x 80 mm	570 x 330 x 80 mm	570 x 330 x 80 mm
Suggested Mounting Height	6-7m	8-9m	9-10m
Lamp Weight	3.4kg	3.4kg	3.4kg
Package Dimension	630 x 390 x 140 mm	630 x 390 x 140 mm	630 x 390 x 140 mm

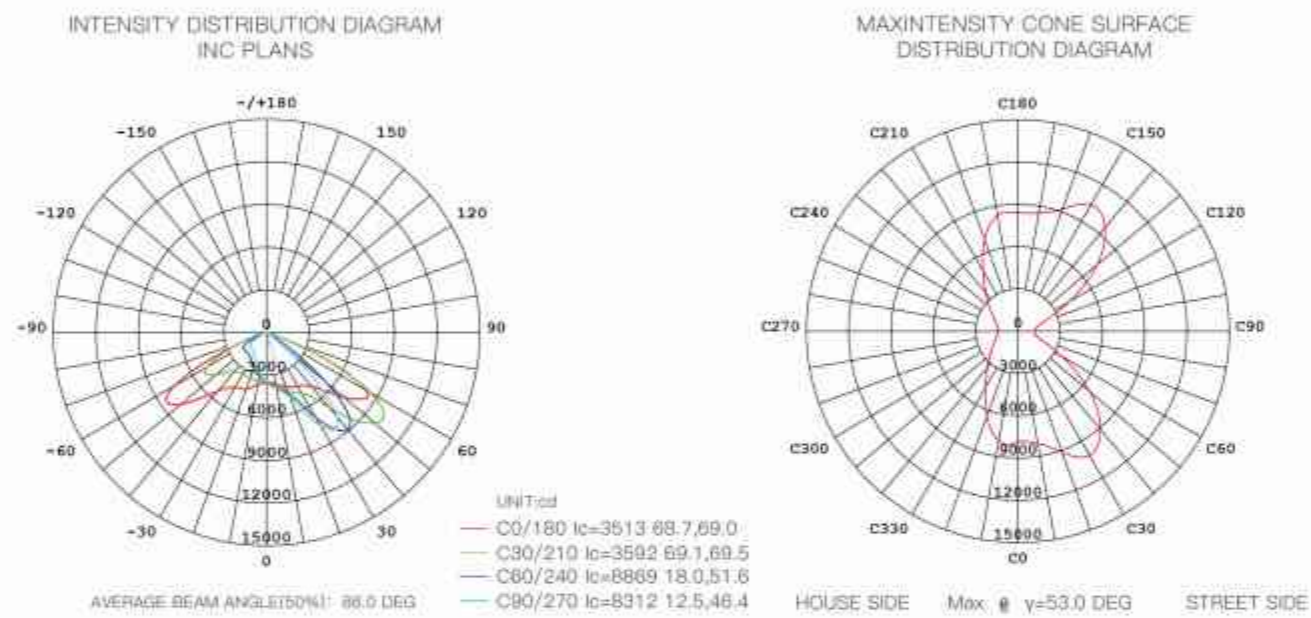
LAMP DIMENSION



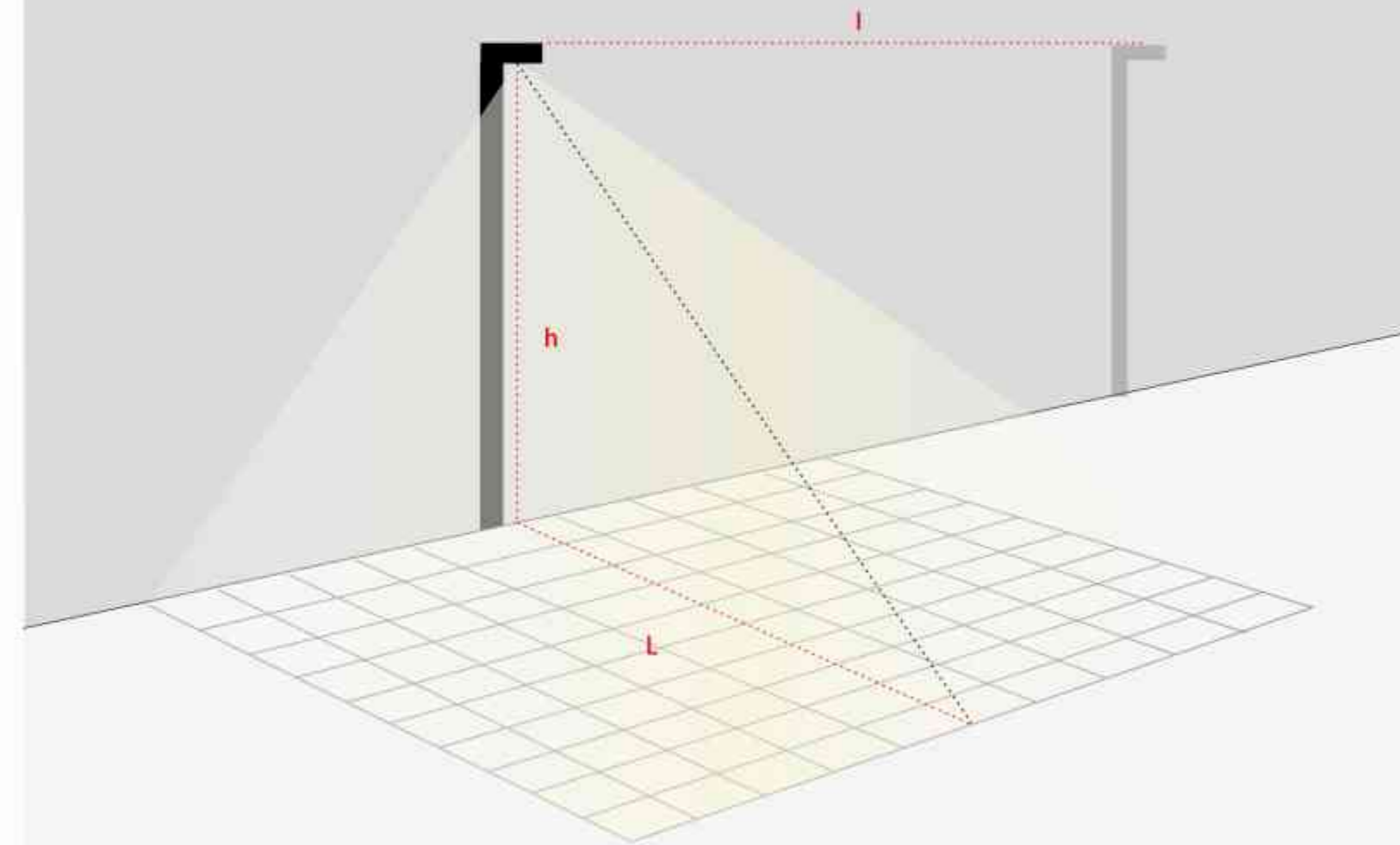
LED PARAMETER

Street Light Intensity Test Report(100W Parameter)

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	KY-E-XY-002	Eff:176.26lm/W			
NOMINAL POWER (W)	100	I _{max} (cd)	10381	η street up (%)	0.0
RATED VOLTAGE (V)	48	LOR (%)	100.0	η street down (%)	62.3
NOMINAL FLUX (lm)	8813.16	TOTAL FLUX (lm)	17626	η house up (%)	0.0
LAMPS INSIDE	2	MAXIMUM θ (C, Y)	150°, 53.0°	η house down (%)	37.7
TSET VOLTAGE (V)	46.0	η up (%)	0.0	76 FLASHAREA (m ²)	0.00100
		η down (%)	100.0	STL	18.549



LIGHT GUIDE



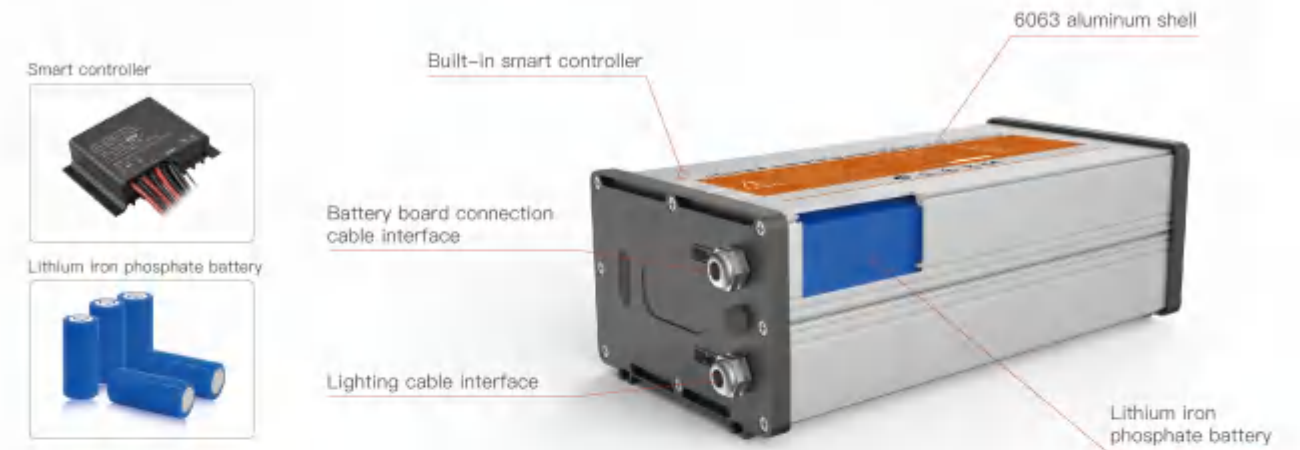
D=distance to height ratio (L/h)
 h=height of light pole
 l=pole distance
 L=width of lighting area

STRUCTURE DISPLAY



INTEGRATED LITHIUM BATTERY AND CONTROLLER UNIT

Using high-quality lithium iron phosphate battery, the built-in controller module stabilizes the voltage and limits the current, intelligently monitors the battery voltage, effectively protects the lithium battery pack, will not be damaged when the output voltage is too high or too low, prolongs battery life, simple structure, high performance, stable and easy to maintain.



The lithium battery storage and control system adopts high-quality cells and high sorting accuracy.

Product Model	Specification	Voltage	L(mm)	W(mm)	H(mm)	Weight(kg)
C2-42.12	42AH	12.8V	352	184	130	7.06
C2-60.12	60AH	12.8V	451	184	130	9.28
C2-42.24	42AH	25.6V	583	184	130	12.23

Remarks: 100% thermal protection measures for lithium battery products. Lithium battery packs and switches use waterproof four-pin plugs, barcode OEM capacity and production date, (fixed installation of lithium battery holes with 120mm chute). Complete set of lithium battery warranty is three years.

• PROTECTION CLASS

IP65: Dust tightness can completely prevent the intrusion of foreign objects, and can completely prevent the intrusion of dust, prevent the intrusion of sprayed water, and prevent the water sprayed from the nozzle from all directions from entering the lamp and causing damage; IK08: withstand 5J impact force (equivalent to the impact of a 1.7KG object falling from a height of 300mm on the surface).



• IP65



• IK08

SOLAR PANEL

Monocrystalline solar panel:

The photoelectric conversion efficiency of monocrystalline silicon solar cells is 22.3%, which is the highest photoelectric conversion efficiency among all types of solar cells. Since single crystal silicon is generally packaged with tempered glass and waterproof resin, it is sturdy and durable, and its service life is generally up to 15-25 years.



Rated power	Rated voltage	Rated current	Open circuit voltage	Short circuit current	Width(mm)	Length(mm)	Height(mm)	Weight (kg)
100	18	5.56	21.6	5.89	680	880	30	6.74
120	18	6.67	21.6	7.34	680	1030	35	8.20
120	36	3.33	43.2	3.67	680	1030	35	8.20
180	18	10.0	21.6	11.0	680	1480	35	11.70
180	36	5.00	43.2	5.50	680	1510	35	12.00
240	36	6.67	43.2	7.33	1000	1330	35	15.30
360	36	10.0	43.2	11.0	1000	1970	35	22.90

Polycrystalline solar panel:

The production process of polycrystalline silicon solar cells is similar to that of monocrystalline silicon solar cells, but the photoelectric conversion efficiency of polycrystalline silicon solar cells is slightly lower than that of monocrystalline silicon, and the photoelectric conversion efficiency is about 18.8%. In terms of production cost, it is cheaper than monocrystalline silicon solar cells. The material is simple to manufacture, power consumption is saved, and the total production cost is lower.



Rated power	Rated voltage	Rated current	Open circuit voltage	Short circuit current	Width(mm)	Length(mm)	Height(mm)	Weight (kg)
100	18	5.56	21.6	6.00	670	1020	35	7.60
100	36	2.78	43.2	3.00	670	1020	35	7.60
150	18	8.33	21.6	9.00	670	1470	35	11.30
150	36	4.17	43.2	4.50	670	1470	35	11.30
200	36	5.56	43.2	6.00	990	1320	35	15.10
290	36	8.06	43.2	8.70	990	1960	35	22.50

APPLICATION SCENARIOS



Streets, trails, bike paths



Residential street



Commercial street, office complex



Parks, squares, amusement parks



Rural/urban road



Highways and Ring Roads

LIGHT POLE ACCESSORIES

The following is only a schematic diagram of the installation. The height and installation method of the light pole can be adjusted appropriately according to the needs of the site.



