

The background of the advertisement is a long, straight road at night, illuminated by a series of tall, modern streetlights. The lights create a strong sense of perspective, leading the eye down the road. The sky is a deep, dark blue, and the surrounding landscape is dark and silhouetted. In the foreground, there are some blurred light trails from vehicles, suggesting movement and activity. The overall mood is one of modern, reliable lighting in a natural setting.

PHILIPS

Solar Lighting

Enhancing life with sunlight at night

Philips Solar LED Lighting
Systems



SunStay

-BRP 710

Integrated solar street light with Lithium Ferro Phosphate battery, solar panel, charger and PIR sensor built into the luminaire. Pressure die cast aluminium for sturdiness and long life. Specially designed pole mounting bracket allows different tilt angles, lateral and pole top mounting. SunStay hybrid ensures zero blackout nights throughout the year.



Key features

- **Easy to install:** All in one construction, adjustable tilt angles of 0 to 15 degrees, post top and lateral mounting positions, no cable trenching required
- **Long Lifetime:** Sturdy Aluminum die cast construction and LiFePO4 battery.
- **Suitable for harsh environment:** Water, dust and corrosion resistant. withstands extreme weather conditions, IP65 certified
- **Solar hybrid:** Can be retrofitted on existing 220V AC infrastructure and poles.
- **High efficacy:** High luminous efficacy of 175 lm/Watt to maximize battery performance.
- **Smart PIR motion sensor:** Built in PIR sensor can detect people's motion to save energy by light dimming
- **Smart:** Self diagnosis with LED indicators of battery charging and discharging
- **Strong seasonal resilience:** Smart hybrid charging from AC which ensures full battery capacity everyday.

Specifications

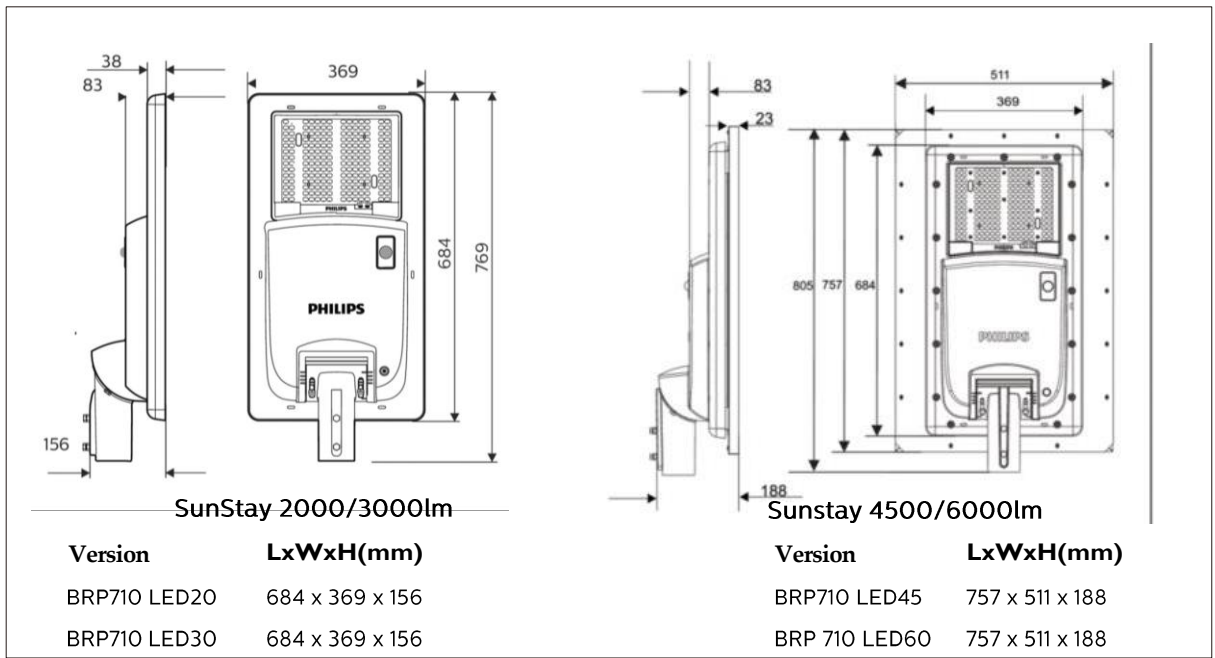
CE

IK08

IP65

	2000 lm		3000 lm		4500 lm		6000 lm
	Off-grid	Hybrid	Off-grid	Hybrid	Off-grid	Hybrid	Hybrid
System wattage	12V DC, 11 Watts		12VDC, 17 Watts		12VDC, 26 Watts		12VDC, 35 Watts
System lumen output	2000lm		3000lm		4500lm		6000 lm
Solar panel capacity	28/35W	28W	35W		60W		60W
Battery capacity	174Wh		256 Wh		384Wh		384 Wh
Color temperature	3000K, 4000K, 5700K (*2700K available on request)						
System efficacy	175lm/W						
Battery type	Lithium Ferro Phosphate LiFePo4						
Charging electronics	Integrated MPPT charger with driver						
Driver efficiency	>90%						
IP Rating	IP65						
Housing	Aluminum pressure die cast with anti-corrosive coating						
Front cover	UV stabilized polycarbonate cover						
CRI	>70						
Switch for On-Off	Provided						
LED indicators	Battery charging / discharge / disconnect						
Mounting	Post top and lateral mounting bracket (dia 48-60mm)						
Adjustable tilt angle	0-15 degree adjustable						

Dimension (mm)



Ordering Information (Key Runners)

Product description	12NC
BRP710 LED20 CW MR S1 12V LFP AIO Solar Equip	919515812387
BRP710 LED30 CW MR S1 12V LFP AIO Solar Equip	919515812388
BRP710 LED45 CW MR S1 12V LFP Solar	919515813566
BRP710 LED20 CW MR HY FDIM50 SOLAR	919515813976
BRP710 LED30 CW MR HY FDIM50 SOLAR	919515813977
BRP710 LED45 CW MR HY FDIM50 SOLAR	919515813978
BRP710 LED60 CW MR HY FDIM20 SOLAR	919515813979

[Click here for complete order information](#)





Integrated solar post top lantern with Lithium Ferro Phosphate battery, vertically mounted mono-crystalline solar panel and MPPT charger. Extruded aluminum construction for sturdiness and long life. Choice of street light and post top optics and pole height of 4 & 6 meters. Charger and battery accommodated inside the pole and accessible through service hatch for ease of maintenance. Vertically mounted panels on all four sides to catch sunlight throughout the day.



Key features:

- Replaceable IP-68 Lithium Ferro Phosphate battery for long life and hassle free operations
- MPPT charge controller for maximum efficiency
- Sturdy aluminum alloy construction for sturdiness and long life
- Factory set dimming profile for run time maximization

Specifications

		Post Top	Street
Luminaire	Luminaire	BGP161	BRP711
	Lumen output	2500lm	6000lm
	CCT/CRI	4000/5000K; >70	
	Standard Light profile	6H 100% + 6H 50%	
	Type service life of LEDs	>50,000 hours	
LiFePO4 battery	Battery Technology	LiFePO4	
	Battery capacity	60Ah/100Ah	
	Lifecycles	>2000cycles @90%DOD	
	IP rating	IP68	
	Operating temperature	-0 to 60 °C	
	Dimension	120x146x470mm	
	Weight	8.5kg	12.2kg
PV Module	PV cell technology	mono-Si	
	Watt peak rating per module	180 Wp/23Voc	360 Wp/23Voc
	Solar cell efficiency(under STC)	16.40%	
	No. of strings	4	8
	String topology	Parallel	
	PV module lifespan	20years	
	Dimension	172x172x2000mm	172x172x4000mm
Power Management	Programmable per application scenario	Yes	
	Runtime extension	Yes	
	Dynamic light profile customer specific	Yes	
	Remote Monitoring (LCU)	Yes	
Pole	Total column length	4m/6m	
	Aluminum botton part	2m	
	Solar PV module	2m	4m
	Size of square column	172 x 172 mm	
	Construction material	Aluminum alloy	
	Aluminum surface finish	Power	
	Security	Special locking mechanism	
	Total nominal peak power output	180Wp	360Wp
	Light pole certificate	EN 40-6	
	PV certificate	CE	

Order Information

Type	12NC	SAP description	Voltage (V)	Product size (cm)	Gross weight (kg)
Pole	911401897201	BDP301 LED 4M 9006	12	32 x 32 x 411	73
	911401800802	BDP301 LED 4M 7043	12	32 x 32 x 411	73
	911401897301	BDP301 LED 6M 9006	12	32 x 32 x 607	116
	911401800502	BDP301 LED 6M 7043	12	32 x 32 x 607	116
LiFePO4 battery	911401800602	ZJS601 60AH 12.8V Battery	12	12.1 x 14.7 x 47.1	9.5
	911401800702	ZJS601 100AH 12.8V Battery	12	12.1 x 14.7 x 47.1	13.2
Luminaire	824110111071	BGP161 LED2500/NW 12V SD 4.0M 9006 CC	12	57.8 x 57.8 x 26.5	12
	824110111051	BGP161 LED 2500/NW 12V SD 4.0M 7043 CC	12	57.8 x 57.8 x 26.5	12
	824110111031	BRP711 LED60/CW 44W 12V DM SD 6.0M CC	12	59.5 x 39 x 9	8.8

[Click here for more information](#)





Solar Gen 4.0 Luminaires

- BRP 39x/ 38x / 37x

RoadFlair



GreenVision Xceed



GreenVision Xceed V2



Comprehensive range of solar streetlights starting from 5000 lumens to 24000 lumens, with upto 170 lm/w efficacy, and option of hybrid versions. Suitable for major roads, highways and parking areas. configurable dimming profile and load wattage. A reliable solar LED lighting system consists of well-designed LED luminaire, photovoltaic panel, battery, charge controller, connectors and embedded software. The whole is greater than sum of its parts.

Key Features:

- High lumen efficiency of upto 170 lm/W reduces cost per light point by reducing battery and panel size
- Brings light to areas without access to electric grid
- Environment friendly
- Saves energy
- Preserves landscape as no trenching for cabling required
- Sturdy construction for long life
- Smart city ready for sustainable cities
- Configurable dimming profile and load wattage
- Compatible with multiple battery types (LiFePO4, LMLA GEL)
- Pressure die-cast aluminum housing for sturdiness and excellent thermal management
- Available in both off-grid and hybrid versions
- Unique functional design Sleek, light-weight and well-designed luminaire. Supports stand alone dimming functions
- Value for money / most competitive product in its segment Perfect for renovation & upgrade projects.

Application

- Roads
- Highways
- Parking
- Streets

Specifications

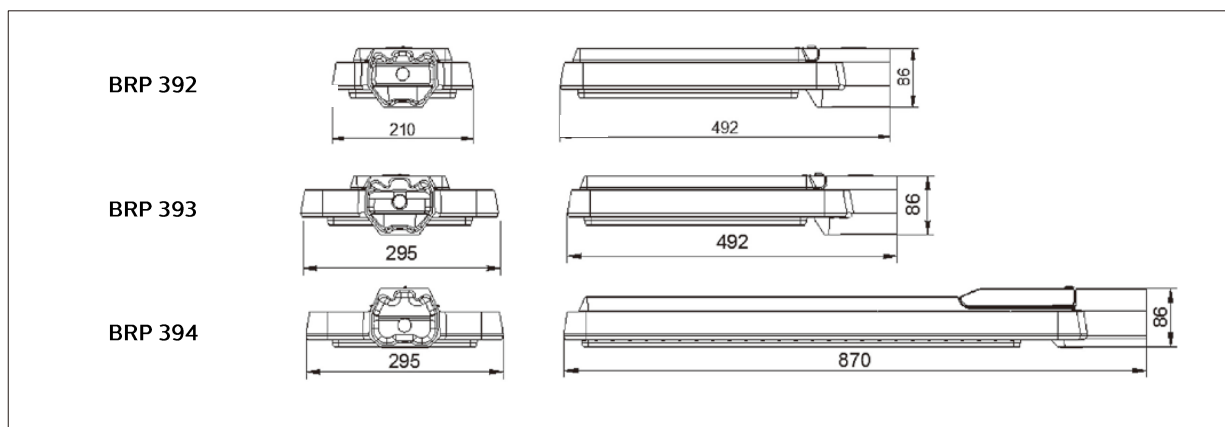


		BRP 392/393/394	BRP 381/382/383	BRP 371/372/373
General Characteristics	Type	50,000 hrs		
	Lifetime	(70% lumen maintenance @ Ta = 35°C)		
	Optics	DM		
	Impact Resistance	IP66		
	SDCM	5		
Light Technical Characteristics	Light source	LED		
	LED driver	Combo CC Gen 4.0		
	LED efficacy	Upto 170lm/W	Upto 160lm/W	
	System lumen output(lm)	Upto 24000 lumens		
	CRI	70±5		
	Color Temperature	CW (NW and WW available on request)		
Installation	Ø42-60mm pole, sideentry		Ø34-49mm pole, sideentry	

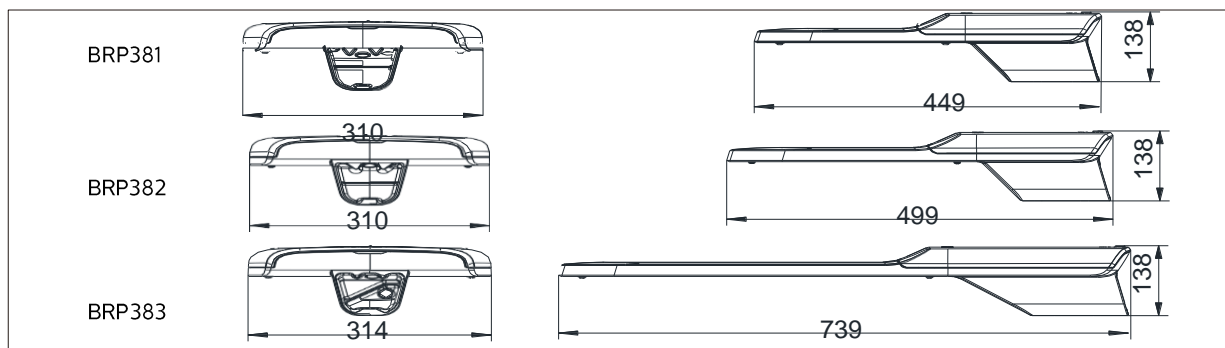
		BRP 392/393/394	BRP381/382/382	BRP371/372/372
Environmental Characteristics	Windage area	BRP392 : 0.1m ² ; BRP393 : 0.14m ² ; BRP394 : 0.25m ² <12m Optimized	BRP381 : 0.14m ² ; BRP382 : 0.16m ² ; BRP383 : 0.23m ² < 12m Optimized	BRP371 : 0.13m ² ; BRP372 : 0.16m ² ; BRP373 : 0.27m ² <12m Optimized
	Mounting height	for 5 to 12m		
	Working temperature	- 30°C <Ta <50°C		
	Wind force	Up to 60m/s		
	Relative humidity	Up to 95%RH		
Mechanical	Housing Material	High pressure die-cast aluminum heat		
	Gasket material	Resistant silicone rubber		
	Cover	Transparent and weather resistant grade polycarbonate	Glass	Glass
	Finishing	Gray Paint RAL7040	Gray Paint RAL7040	Gray Paint
Product Information	Dimensions (LxWxH)	BRP392: 492x210x86; BRP393: 492x295x86 BRP394: 870x295x86	BRP381: 449x310x138 BRP382: 499x310x138 BRP383: 739x314x138	BRP371: 422 x 318 x 136 BRP372: 522 x 318 x 136 BRP373: 850 x 320 x 136
	Weight	BRP392: 7kg; BRP393: 7kg; BRP394: 10kg	BRP381: 5.3kg; BRP382: 6kg; BRP384: 10kg	BRP371: 7.9kg; BRP372: 9.3kg; BRP374: 14.5kg
	Certifications	CE/CB		
	Classifications	IP66; IK08; Class I; RoHS		
	Control Options	As per charger controller		

Dimensions(mm):

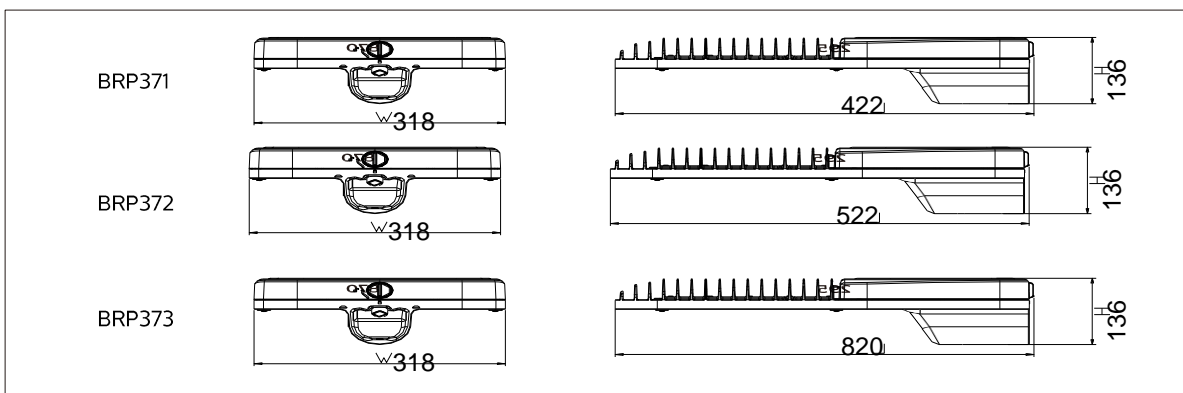
RoadFlair(BRP39x)



GreenVision Solar BRP 38x (mm)



GreenVision Solar V2 BRP 37x (mm)



Order Information

Product description	12NC
BRP392 LED80/CW 50W DM SD 12.5M	911401815702
BRP393 LED150/CW 90W DM SD 12.5M	911401815802
BRP394 LED240/CW 150W DM SD 12.5M	911401815902
BRP381 LED75/CW 50W DM	911401816302
BRP382 LED140/CW 90W DM	911401816202
BRP383 LED240/CW 150W DM	911401816102
BRP371 LED7500/NW 50W DM SD 12.5m	911401821302
BRP372 LED12500/NW 80W DM SD 12.5m	911401821202
BRP373 LED24000/NW 150W DM SD 12.5m	911401821102
BRP 371 LED7500/CW 50W DM SD 12.5m	911401821002
BRP372 LED12500/CW 80W DM SD 12.5m	911401820902
BRP373 LED24000/CW 150W DM SD 12.5m	911401820802





Solar Luminaires

-BRP409 & 049

GreenLine V2 Solar



SmartBright Solar



Solar powered outdoor lighting products are ideal for lighting the area in remote location where the electricity is unavailable or erratic. Even in urban areas, these find great usage to reduce dependency on conventional power and contribute towards green energy. Reliable and long life makes this solution effective in fulfilling our present and future lighting requirements. Configure lumen pack, change the dimming profile, monitor health, read analog parameters from ground level using simple easy-to-use android app.

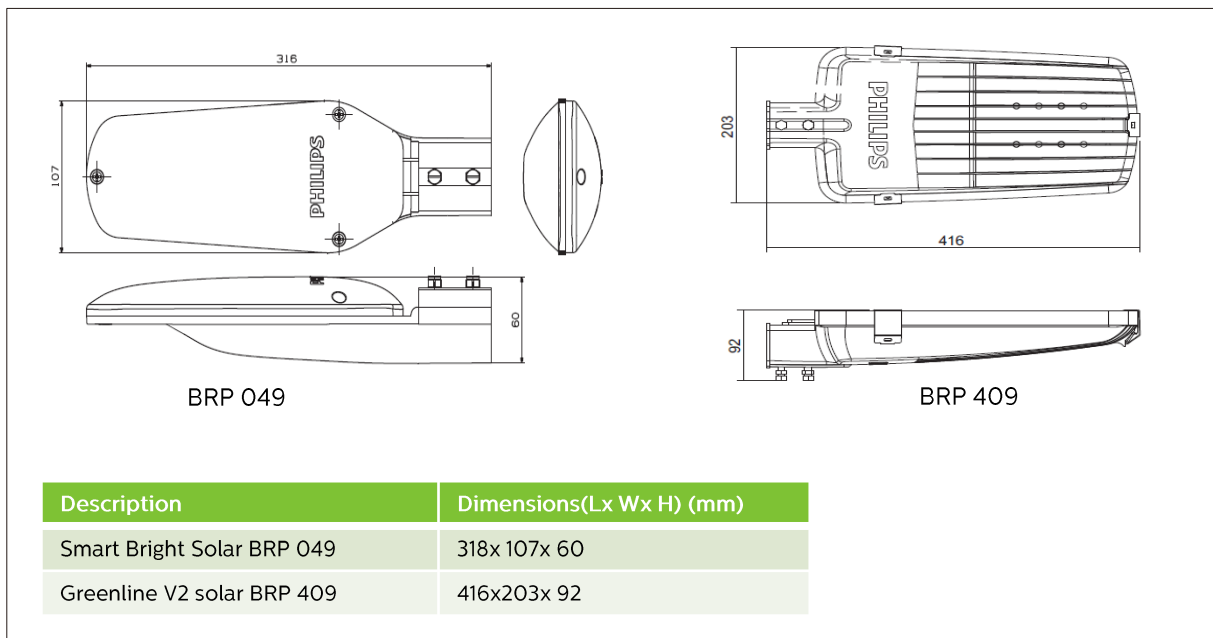
Key features

- Pressure die-cast aluminum housing for sturdiness and excellent thermal management with option of Polycarbonate and glass covers
- Remote health monitoring
- Inbuilt MPPT charge controller
- Two step dimming options
- Compatible with multiple battery types
- Available in both off-grid and hybrid versions
- No line voltage, trenching and metering
- No power outages
- Battery backup for cloudy and rainy days
- Independent power and light source, hence no single point of failure
- No Running cost: This luminaire runs with natural source of energy, hence there is no electricity cost
- Green Solution: Runs 100% on solar energy

Specifications:

Type	BRP 409 GreenLine V2 Solar	BRP 049 SmartBright Solar
Operating Voltage	12/24V	12V DC
System wattage	15-45W	7 – 19 W
Charger efficiency	> 95%	>95%
Lumen output(lm)	1600-5000 lumen, Dim.	900 – 2100 lm
Solar charge controller	Integrated MPPT Charger + Driver	Integrated MPPT Charger + Driver
Remote Monitoring	Health Monitoring via Android BLE app	Health Monitoring via Android BLE app
Housing	High pressure die cast aluminum	High pressure die cast aluminum
Cover	Polycarbonate / Glass	Polycarbonate
IP protection	IP 66, Class I	IP65, Class I
CRI/CCT	>70, 5700K	>70/5700K
Hybrid	Optional	Optional

Dimensions:



Order information- Key Runners:

Product description	12NC
BRP409 08 21 CW MR FG S1 12V PR	919515811296
BRP409 08 21 CW MR PC S1 12V PR	919515811042
BRP409 12 30 CW MR FG S1 12V PR	919515811297
BRP409 12 30 CW MR PC S1 12V PR	919515811043
BRP409 16 36 CW MR FG S1 12V PR	919515811298
BRP409 16 36 CW MR PC S1 12V PR	919515811044
BRP409 24 45 CW MR FG S1 24V PR	919515811299
BRP409 24 45 CW MR PC S1 24V PR	919515811045
BRP409 LED 36 CW MR FG S1 12V	919515810589
BRP409 LED 36 CW MR FG S1 12V DIM	919515810618

[Click here for more information](#)

Product description	12NC
BRP049 LED 09 CW MR S2 12V GEL Solar Equip	919515812164
BRP049 LED 12 CW MR S2 12V GEL Solar Equip	919515812165
BRP049 LED 15 CW MR S2 12V DIM Solar Equip	919515812160
BRP049 LED 18 CW MR S2 12V GEL Solar Equip	919515812167
BRP049 LED 19 CW MR S2 12V GEL Solar Equip	919515812168
BRP049 LED 21 CW MR S2 12V GEL Solar Equip	919515812169

[Click here for complete order information of BRP 049](#)



SmartBright Solar All-In-One Streetlight

-BRP 110

All in one solar street light with lithium ferro phosphate battery, solar panel, charger and microwave sensor built into the luminaire. Competitively priced AIO with quick breakeven ROI compared to conventional lighting. It brings light to areas where grid is difficult to reach.



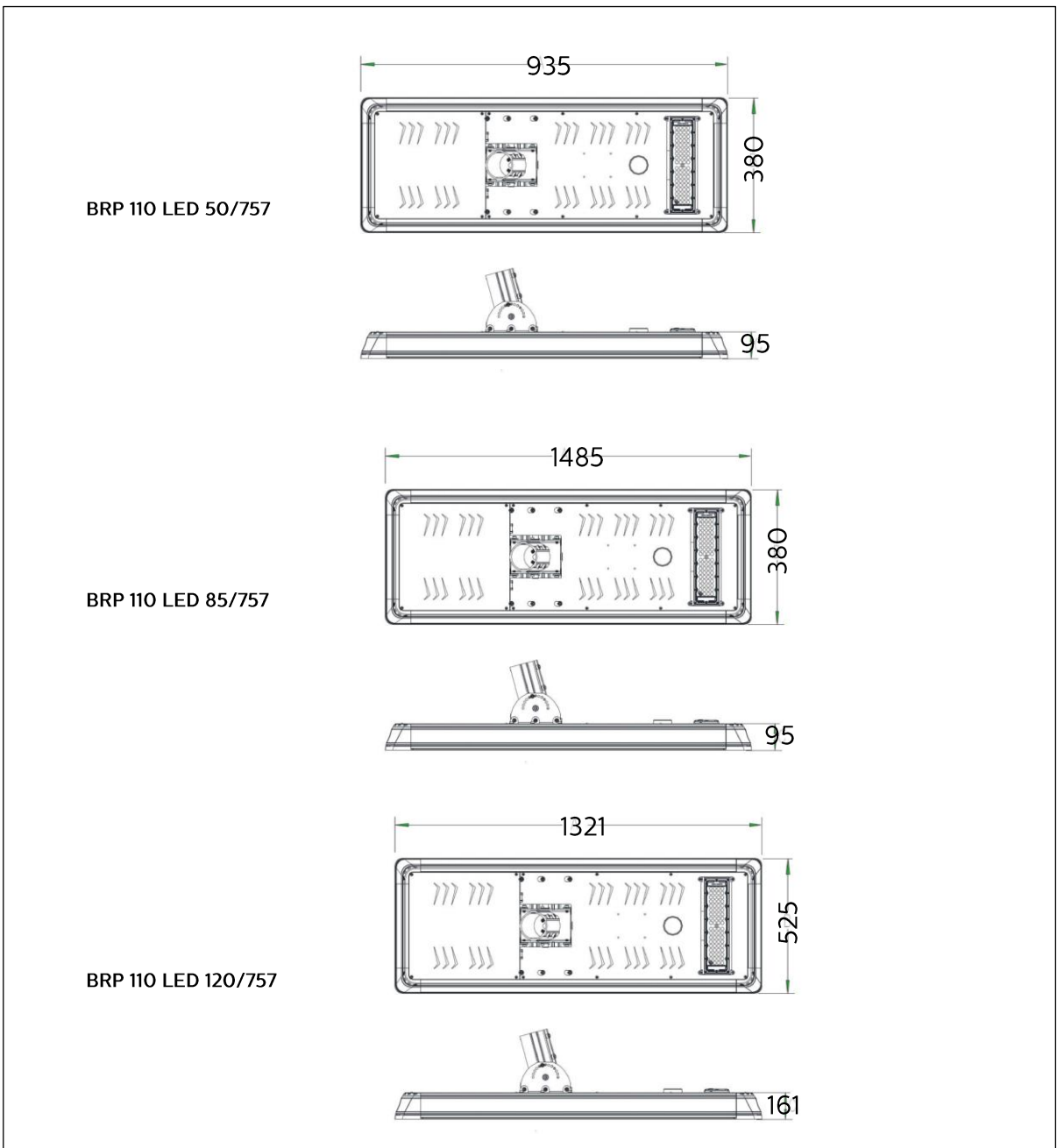
Key Features

- **Easy to install:** All in one construction, adjustable tilt angles, no cable trenching required
- **Suitable for harsh environment:** Water, dust and corrosion resistant. withstands extreme weather conditions, IP65 certified.
- **Wireless Remote:** Wireless remote for configuration / hibernation.
- **High efficacy:** High luminous efficacy of upto 150lm/W to maximize battery performance.
- **Smart motion sensor:** Built in microwave sensor can detect people's motion to save energy by light dimming

Specifications

		AIO 5000	AIO 8500	AIO 12000
System lumen output (lm)		5000	8500	12000
Color temperature		5700K		
CRI		>70		
System efficacy		150 lm/w	140 lm/w	150 lm/w
Grid connection type		Off-grid		
Driver efficiency		>90%		
Battery	Type	12.8V, LiFePO4		25.6V , LiFePO4
	Capacity	>300Wh	>530Wh	>765Wh
Photo voltaic panel	Type	Monocrystalline		
	Panel capacity	50Wp	90Wp	120Wp
Default Dimming profile		First 2 hours : 30% brightness, if presence detected luminaire goes to 100% Next 3Hours : 20% brightness, if presence detected luminaire goes to 60% Next 6Hours : 10% brightness, if presence detected luminaire goes to 30% Next 1 hour : 30% brightness, if presence detected luminaire goes to 50%		
Operating temperature		Charging : 0-45 degree C, discharging : -20 to 50 Degree C		
IP		IP65 (components)		
Housing material		Body : AL1060/stamping, Housing side frame : AL6063/extrusion, Bracket : CRSS/SPCC, Pole adaptor:AL6063/extrusion		
Optical cover/lens material		Polycarbonate cover		
Mounting		Adjustable pole top mounting		

Dimensions :



Order information:

Product description	12NC
BRP110 LED120/757	911401863881
BRP110 LED85/757	911401863781
BRP110 LED50/757	911401863681



SmartBright Solar Flood Light

-BVP 080

Solar flood lighting DIY kit with lithium ferro phosphate battery built in the luminaire, Split folding solar panel, remote controller and installation accessories. IP 66, IK07, Extruded aluminium construction for sturdiness and long life. Choice of four lumen packs – 1000, 2000, 3000, 4800 lumens.



Key Features:

- Solar floodlight range of 4 product– equivalent to 100W, 200W, 300W and 500W Halogen floodlights respectively
- Infra red remote controller to dim luminaires with three pre-sets- low, medium, high
- Aluminum die cast housing
- Split folding solar panel
- LiFePO4 battery included inside the luminaire.

Specifications:

	BVP 080 LED 10/757 060	BVP 080 LED 20/757 100	BVP 080 LED 30/757 150	BVP 080 LED 48/757 200
System wattage	10W	20W	30W	48W
LED lumen (at max brightness)	1000 lumen	2000 lumens	3000 lumen	4800 lumen
CCT/CRI/ Life Class	5700/ >70 50k hrs, L70B50			
Battery capacity	6.4V, 5Ah	12.8 V, 5 Ah	12.8 V, 10Ah	12.8 V, 15Ah
Battery chemistry	Lithium Ferro Phosphate			
Solar Panel	10Wp/ 6V	25Wp/12V	30Wp/12V	50Wp/1V
Dimming profile enabled	Yes 3 options available			
Housing	Pressure die cast aluminum housing			
BMS	Yes, Battery Management System for battery safety			

Order information

Product description	12NC
BVPO80 LED10/757 060	911401859681
BVPO80 LED10/757 060 CN	911401860081
BVPO80 LED20/757 100	911401859781
BVPO80 LED20/757 100 CN	911401860181
BVPO80 LED30/757 150	911401859881
BVPO80 LED30/757 150 CN	911401860281
BVPO80 LED45/757 200	911401859981
BVPO80 LED45/757 200 CN	911401860381

[Click here for more information](#)



Tango G2 Gen 4.0 Solar

- BVP 28x

Tango G2 Gen 4.0 Solar is comprehensive range of solar flood lights starting from 5000 lumens to 15000 lumens, with 125 lm/w efficacy, and option of hybrid versions, configurable dimming profile and load wattage. It can be used for various lighting applications, such as area lighting, bill-board, façade, industry area, recreational sports and other general applications. Its specially designed heat sink incorporates aesthetics and functionality to ensure reliability and long lifetime. Tango G2 LED takes advantage of LED technology which provides energy savings and a longer lifetime, bringing area lighting into a new era.



Key Features

- High lumen efficiency of upto 125lm/W
- Brings light to areas without access to electric grid
- Environment friendly & Saves energy
- Smart city ready for sustainable cities
- Configurable dimming profile and load wattage
- Compatible with multiple battery types (LiFePO4, LMLA GEL)
- Available in both off-grid and hybrid versions Sleek, light-weight and well-designed luminaire. Supports stand alone dimming functions
- Value for money / most competitive product in its segment
- Perfect for renovation & upgrade projects.

Application

- BillBoard
- Façade
- Area Lighting
- Parking

Specifications:



	Parameters	
General characteristics	Type	BVP 281/282
	Life Time	50,000 hrs(70% lumen maintenance @ Ta=35°C)
	Tm21Protection	100,000 Hours L80 Ta 35°C
	Optics	WB
	Impact Resistance IP	IP66
	SDCM	5
Light Technical Characteristics	Light source	LED
	LED driver	Programmable driver
	System lumen output(lm)	Upto 15,000 lumen
	CRI	>70
	CCT	CW-5700K

Order Information

Product description	12NC
BVP281LED50/CW 40W S-WB SD 12.5m	911401820502
BVP281LED100/CW 80W S-WB SD 12.5m	911401820602
BVP282 LED150/CW 120W S-WB SD 12.5m	911401820702

[Click here for more information](#)



Combo CC Gen 4.0

Solar combo charge Controller Gen 4.0 with Maximum Power Point Tracking

Combo CC Gen 4.0 is most comprehensive range of solar charge controllers suitable for solar lighting in major, intermediated and minor roads in off-grid and hybrid applications. High system efficacy, optimized design and long life ensures lower cost of ownership. Configurable and easy to operate with remote monitoring and control ready.



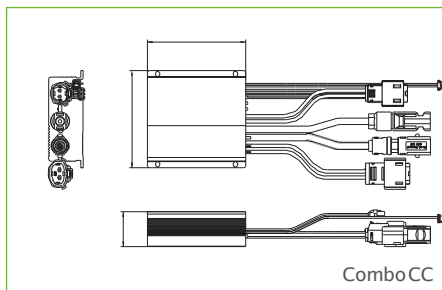
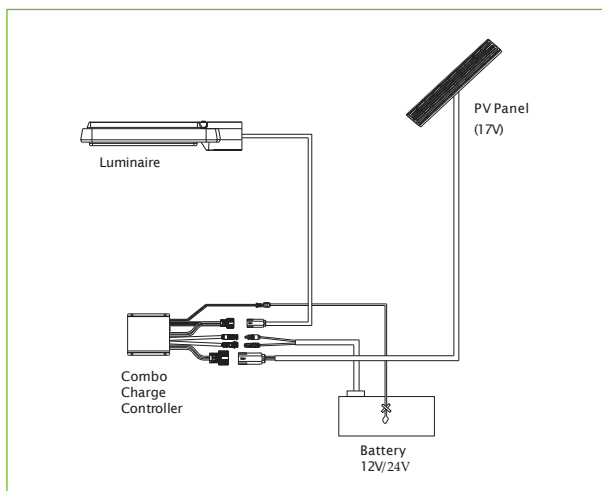
Key Features:

- Compatible with Gen 4.0 solar luminaires (BRP38x/39x)
- Off-grid and hybrid options available
- Battery type/ voltage/ capacity, LED wattage, dimming steps, PV panel capacity are configurable.
- IP65 housing with IP67 connectors, RH 95%
- IEC62109-1, IEC61547, CISPR15, IEC62093, IEC61347-2-13, EN50530, IEC62384.
- Available in off-grid and hybrid options.
- Can drive luminaires from 5000 to 24000 lumens for a wide range of autonomy days and solar insolation.
- Integrated LED driver enables system efficacy up to 170 lumens/W.
- Integrated protection and control modules.
- Onsite programming and configuration with GUI for panel, battery and dimming profile.
- Metal weatherproof housing with several layer of protections.

Benefits:

- Three different platforms: 200Wp, 400Wp and 600Wp

System Connection Reference:



Specifications

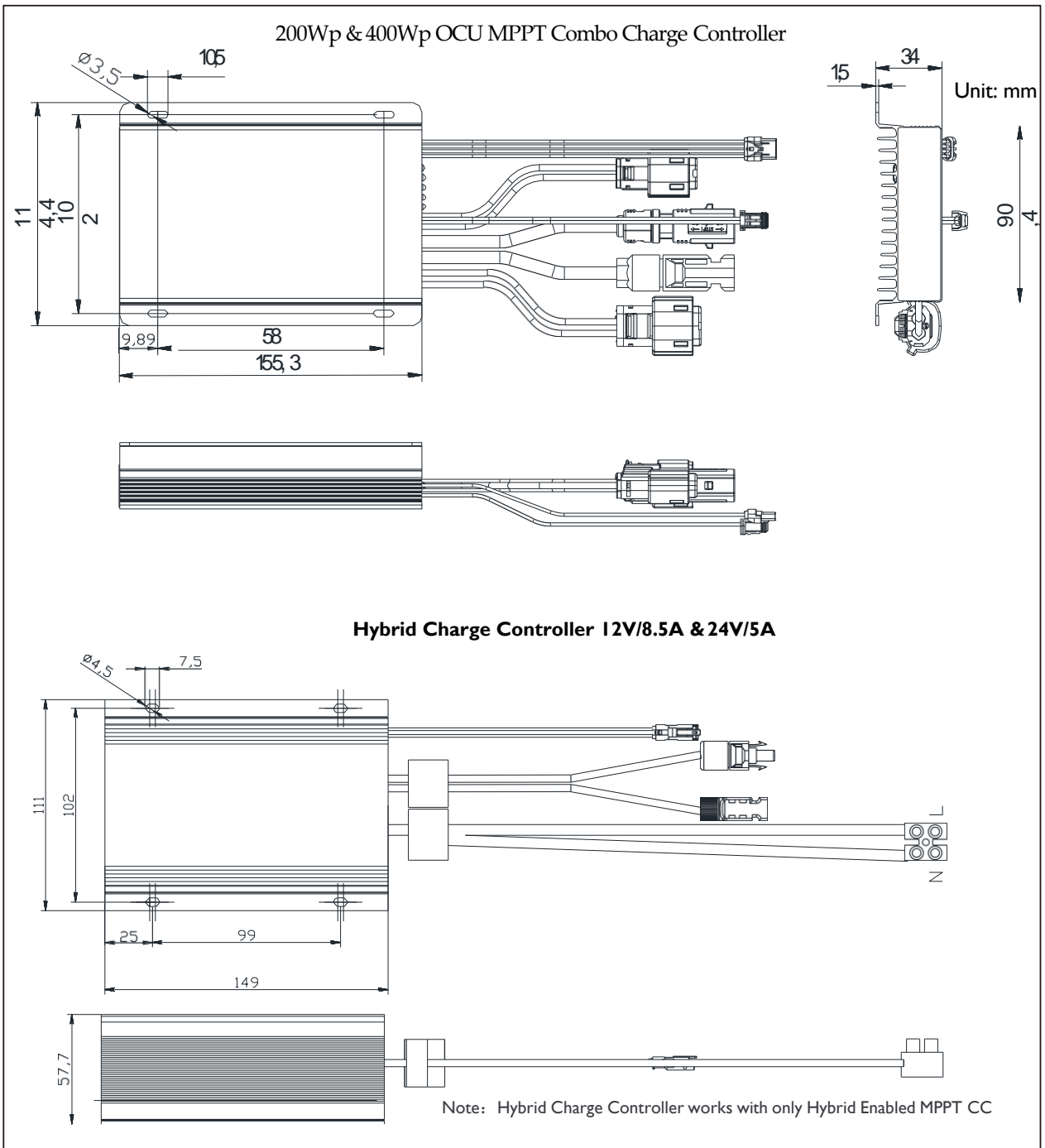
Function	Parameter	ZJS401 CCC 200Wp 12V	ZJS401 CCC 400Wp 24V
Solar Panel	Open Circuit Voltage Voc	22V	44V
	Short Circuit Current Isc	12A	12A
	Voltage at Maximum Power Vmp	18V	36 V
	Maximum Watt Peak Wp	Up to 200 W	Up to 400 W
	Minimum Watt of PV	75W	120 Wp
Battery	Nominal Voltage LA, GEL / LiFePO4.	12V / 12.8V	24V / 25.6V
	Battery Ah	40Ah -180Ah	40Ah-150Ah
Battery Charger	CC current	<17A battery current	
	MPPT Efficiency	>97%(D) >97%(S)	
	Charging Electronics Efficiency @ rated power	>93%	
LED Driver (Battery threshold)	Max Load Current Iout	2.5A	1.7 A
	Maximum LED Wattage Pout	50 W	80 W
	Minimum LED Wattage	15W	25 W
	Dimming	30% Min. (Configurable)	
	Max Load Current Iout	2.5A	1.7 A
Visual indication (2 LED)	Battery Charging	LED Blinking @ 1 Sec ON/off.	
	Battery Recovery (LFP)	LED Blinking @ 0.5 Sec ON/off.	
	Battery Discharging/ LED Load ON	No Indication	
	Battery Deep Discharge cut off	Red LED ON for 800mSec and Off for 5 Sec.	
	Any fault in system	All LED blinking @ 1 sec rate.	
RTE	Run time extension	Optional (Exclusive with Hybrid)	
Protection	Battery	Reverse Polarity, Over Voltage, Non-replaceable Fuse protection in series with battery, Maximum Battery charging current.	
	Solar Panel	Panel Reverse Current, Reverse Polarity, Over Voltage	
	Load	Load short circuit, Load Disconnect/Over Voltage	
Environment	Temperature & Humidity	Gel : -20°C to +45°C LiFePo4: charging - 0°C to +45°C, discharging - 20°C to +45°C Humidity Up to 95% RH	
Standards	IP Rating	IP 67	
	Compliances	IEC62109-1, IEC 61547, CISPR15, IEC62093 IEC61347-2- 13, EN50530, IEC62384	

Specifications Hybrid Charging unit

Function	Parameter	ZJS401 CCC 200Wp 12V	ZJS401 CCC 400Wp 24V
Hybrid Charging	Input Voltage range	170-300 Vrms	
	Rated Voltage	240Vrms	
	Hybrid charging current	8.5A ± 10%	5A ± 10%
	Max. input wattage	140W	180W
	Battery voltage range	10±0.3Vdc to 14.2 ± 0.3Vdc	20±0.5Vdc to 28.4± 0.5Vdc
	Compatible battery chemistry	LA/GEL/LiFePO4 Charging profile controlled by MPPT CC Compatible	
Hybrid Charging Conditions	Charging Start in day	After 7 hrs from dawn based on battery voltage condition. For LA/GEL battery Vbat < 11.8±0.3Vdc For LFP battery Vbat < 12.5V±0.3Vdc	
	Charging Stop in day	After maintaining 1hr of CV/Float level depending on battery type	
	Charging Start in night	Based on battery voltage condition, For LA/GEL battery Vbat < 11.8±0.3Vdc. For LFP battery Vbat < 12.5V±0.3Vdc	
	Charging Stop in night	After maintaining 1hr of CV/Float level depending on battery type. Hybrid will turn OFF the charging if dawn detected irrespective of any other condition.	
	Faults that affect Hybrid Charging	Battery Short Circuit, BNC, BOV, Battery Low Temperature(LFP battery only), Load Over Volt, Over temperature	



Dimension (mm)



Order information

Description	12NC	Net Weight (Kg)
ZJS401 CCC 200Wp 12V RS SOLAR	919415811127	1.100
ZJS402 CCC 400Wp 24V RS SOLAR	919415811130	1.100
ZJS401 HYC 150W 12V SOLAR	919415811128	1.600
ZJS402 HYC 150W 24V SOLAR	919415811131	1.600
OCU Gen4 MPPT Combo Charge Controller	911401809002	0.770
Profiling tool for OCU GEN4	911401809102	0.070

[Click here for more information](#)



Solar Battery Subsystem

-VRLA Gel

Value Regulated Lead Acid (VRLA) battery integrates Gel electrolyte technology to get long service lifetime, high performance in deep discharging. It can be used in wide range of ambient temperature and keep good performance of constant power input.



Key Features

- Gel electrolyte, 12 years lifespan in float service application.
- Excellent capacity restorability, 95% capacity will recover after shortcircuit in 24 hours.
- Low self-discharge rate, less than 3% per month.
- Wide application temperature range, -20°C~55°C.
- High charge efficiency, good small current charge absorption ability.
- Water-proof, patent design, keep battery in good environment for longer life time.
- Ventilation pipe, release the gas from battery to the air for safe CE certification operation.

Specifications

	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V
Battery capacity @77°F	65Ah	80Ah	100Ah	120Ah	150Ah	180Ah	200Ah	220Ah	250Ah
Related voltage	12V	12V	12V	12V	12V	12V	12V	12V	12V
Discharge rate @10hrs	6.5A,10.8V	8.5A,10.8V	10.0A,10.8V	12.0A,10.8V	12.0A,10.8V	18.0A,10.8V	20.0A,10.8V	20.0A,10.8V	25.0A,10.8V
Average-self discharge rate, per month, 77°F (25° C)	≤2%								
Working temperature range	Charge	-20°C ~55°C							
	Discharge	-20°C ~55°C							
	Storage	-20°C ~55°C							
Max. charge current	13A	17A	20A	24A	30A	36A	40A	44A	62.5A
Temperature	18~24mV/°C/pcs								

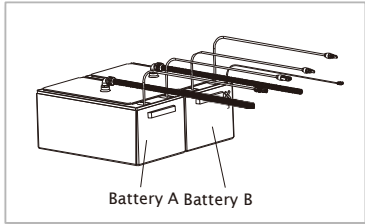
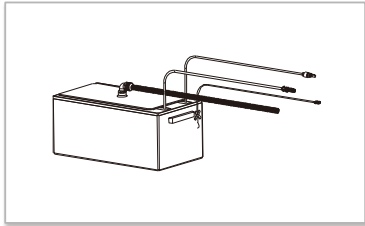
	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V
Battery capacity @77°F	65Ah	80Ah	100Ah	120Ah	150Ah	180Ah	200Ah	220Ah	250Ah
Related voltage	24V	24V	24V	24V	24V	24V	24V	24V	24V
Discharge rate @10hrs	6.5A,21.6V	8.5A,21.6V	10.0A,21.6V	12.0A,21.6V	12.0A,21.6V	18.0A,21.6V	20.0A,21.6V	20.0A,21.6V	25.0A,21.6V
Average-self discharge rate, per month, 77°F (25° C)	≤2%								
Working temperature range	Charge	-20°C ~55°C							
	Discharge	-20°C ~55°C							
	Storage	-20°C ~55°C							
Max. charge current	13A	17A	20A	24A	30A	36A	40A	44A	50A
Temperature	36 ~ 48mV/°C/pcs								

Notice: If the battery stocked more than 3 months once voltage is lower than 12.5V/25V, it is recommended to recharge the battery.



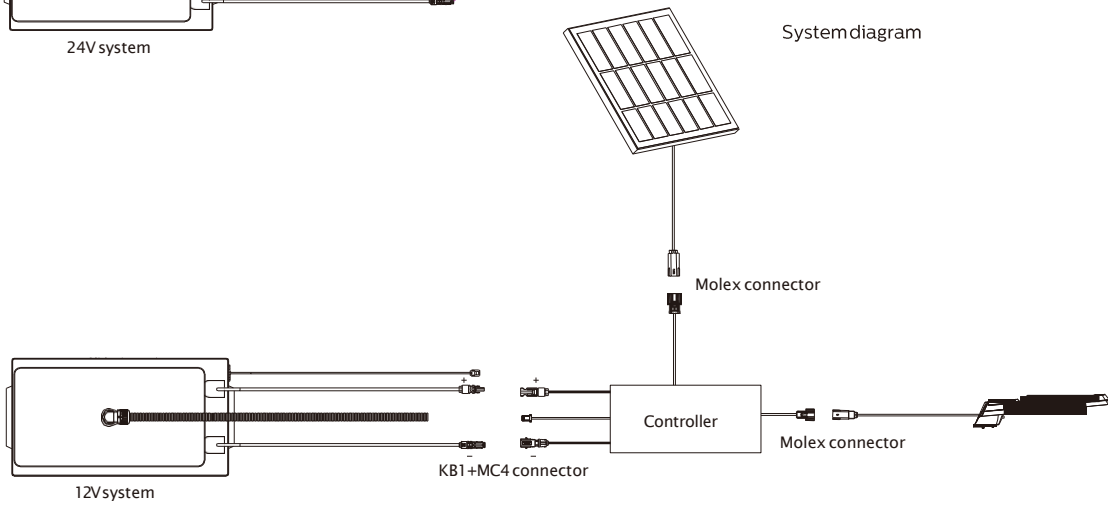
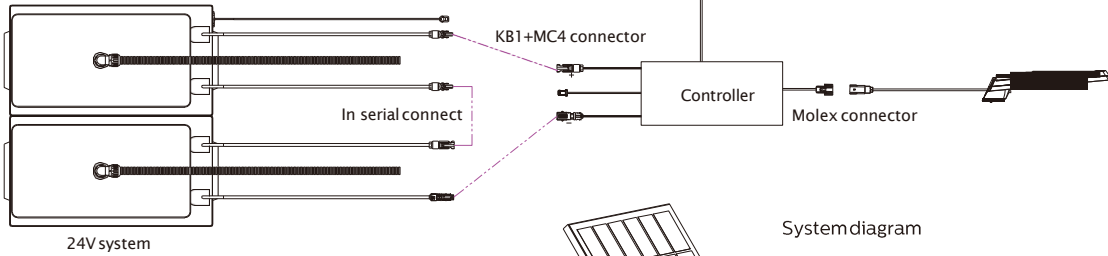
Solar Battery Subsystem

-VRLA Gel

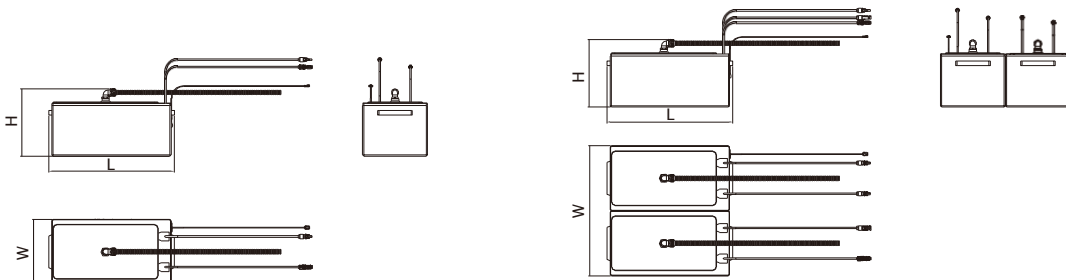


Connector features

- With excellent aging resistance and UV endurance, it can be used in harsh environment
- Environmentally sealed to IP67
- Ambient temperature range: -40~+85C
- Simple crimp-and-poke application
- Tactile and audible mating feedback



Dimension (mm)



Solar Battery Sub-system

-VRLA Gel

Order information

12V Battery Sub-system	12NC	Model	Nominal System Voltage	IP	Mounting Type	Net Weight (kg)	Gross Weight (kg)	Product Dimension LxWxH (cm)	Package Dimension LxWxH (cm)
XGS321 12V/65AH IP68 Gel Bat sys 3yrs	911401818702	6-CNJ-65	12V	68	In-ground	20.60	21.50	35x16.6x23.5	38x19.5x27
XGS321 12V/80AH IP68 Gel Bat sys 3yrs	911401818802	6-CNJ-80	12V	68	In-ground	26.30	27.30	32.9x17.2x27.3	36x20x30.5
XGS321 12V/100AH IP68 Gel Bat sys 3yrs	911401818902	6-CNJ-100	12V	68	In-ground	30.10	31.00	32.9x17.2x27.3	36x20x30.5
XGS321 12V/120AH IP68 Gel Bat sys 3yrs	911401819002	6-CNJ-120	12V	68	In-ground	37.50	38.50	40.6x17.4x26.6	43.5x20x30.3
XGS321 12V/150AH IP68 Gel Bat sys 3yrs	911401819102	6-CNJ-150	12V	68	In-ground	42.50	43.50	48x17x30	51x20x33.5
XGS321 12V/180AH IP68 Gel Bat sys 3yrs	911401819202	6-CNJ-180	12V	68	In-ground	56.00	57.50	52.2x23.8x21.8	53.5x25.3x32
XGS321 12V/200AH IP68 Gel Bat sys 3yrs	911401819302	6-CNJ-200	12V	68	In-ground	59.00	61.00	52.2x23.8x21.8	53.5x25.3x32
XGS321 12V/220AH IP68 Gel Bat sys 3yrs	911401819402	6-CNJ-220	12V	68	In-ground	59.50	61.50	52.2x23.8x21.8	53.5x25.3x32
XGS321 12V/250AH IP68 Gel Bat sys 3yrs	911401819502	6-CNJ-250	12V	68	In-ground	68.00	70.00	52x26.9x22	53.5x28.4x32

12V Battery Sub-system	12NC	Model	Nominal System Voltage	IP	Mounting Type	Net Weight (kg)	Gross Weight (kg)	Product Dimension LxWxH (cm)	Package Dimension LxWxH (cm)
XGS321 12V/65AH IP68 gel bat sys 5yrs	911401816902	6-CNJ-65	12V	68	In-ground	20.60	21.50	35x16.6x23.5	38x19.5x27
XGS321 12V/80Ah IP68 gel bat sys 5yrs	911401817002	6-CNJ-80	12V	68	In-ground	26.30	27.30	32.9x17.2x27.3	36x20x30.5
XGS321 12V/100Ah IP68 gel bat sys 5yrs	911401817102	6-CNJ-100	12V	68	In-ground	30.10	31.00	32.9x17.2x27.3	36x20x30.5
XGS321 12V/120Ah IP68 gel bat sys 5yrs	911401817202	6-CNJ-120	12V	68	In-ground	37.50	38.50	40.6x17.4x26.6	43.5x20x30.3
XGS321 12V/150Ah IP68 gel bat sys 5yrs	911401817302	6-CNJ-150	12V	68	In-ground	42.50	43.50	48x17x30	51x20x33.5
XGS321 12V/180An IP68 gel bat sys 5yrs	911401817402	6-CNJ-180	12V	68	In-ground	56.00	57.50	52.2x23.8x21.8	53.5x25.3x32
XGS321 12V/200Ah IP68 gel bat sys 5yrs	911401817502	6-CNJ-200	12V	68	In-ground	59.00	61.00	52.2x23.8x21.8	53.5x25.3x32
XGS321 12V/220Ah IP68 gel bat sys 5yrs	911401817602	6-CNJ-220	12V	68	In-ground	59.50	61.50	52.2x23.8x21.8	53.5x25.3x32
XGS321 12V/250Ah IP68 gel bat sys 5yrs	911401817702	6-CNJ-250	12V	68	In-ground	68.00	70.00	52x26.9x22	53.5x28.4x32

24V Battery Sub-system	12NC	Model	Nominal System Voltage	IP	Mounting Type	Net Weight (kg)	Gross Weight (kg)	Product Dimension LxWxH (cm)	Package Dimension LxWxH (cm)
XGS322 24V/65AH IP68 Gel Bat sys 3yrs	911401819602	6-CNJ-65	24V	68	In-ground	41.20	43.00	35x33.2x23.5	38x39x27
XGS322 24V/80AH IP68 Gel Bat sys 3yrs	911401819702	6-CNJ-80	24V	68	In-ground	52.60	54.60	32.9x34.4x27.3	36x40x30.5

24V Battery Sub-system	12NC	Model	Nominal System Voltage	IP	Mounting Type	Net Weight (kg)	Gross Weight (kg)	Product Dimension LxWxH (cm)	Package Dimension LxWxH (cm)
XGS322 24V/100AH IP68 Gel Bat sys 3yrs	911401819802	6-CNJ-100	24V	68	In-ground	60.00	62.00	32.9x34.4x27.3	36x40x30.5
XGS322 24V/120AH IP68 Gel Bat sys 3yrs	911401819902	6-CNJ-120	24V	68	In-ground	75.00	77.00	40.6x34.8x26.6	43.5x40x30.3
XGS322 24V/150AH IP68 Gel Bat sys 3yrs	911401820002	6-CNJ-150	24V	68	In-ground	85.00	87.00	48x34x30	51x40x33.5
XGS322 24V/180AH IP68 Gel Bat sys 3yrs	911401820102	6-CNJ-180	24V	68	In-ground	112.00	115.00	52.2x47.6x21.8	53.5x50.6x3.2
XGS322 24V/200AH IP68 Gel Bat sys 3yrs	911401820202	6-CNJ-200	24V	68	In-ground	118.00	122.00	52.2x47.6x21.8	53.5x50.6x3.2
XGS322 24V/220AH IP68 Gel Bat sys 3yrs	911401820302	6-CNJ-220	24V	68	In-ground	119.00	123.00	52.2x47.6x21.8	5.5x50.6x32
XGS322 24V/250AH IP68 Gel Bat sys 3yrs	911401820402	6-CNJ-250	24V	68	In-ground	136.00	140.00	52x53.8x22	53.5x56.8x3.2

24V Battery Sub-system	12NC	Model	Nominal System Voltage	IP	Mounting Type	Net Weight (kg)	Gross Weight (kg)	Product Dimension LxWxH (cm)	Package Dimension LxWxH (cm)
XGS322 24V/65Ah IP68 gel bat sys 5yrs	911401817802	6-CNJ-65	24V	68	In-ground	41.20	43.00	35x33.2x23.5	38x39x27
XGS322 24V/80Ah IP68 gel bat sys 5yrs	911401817902	6-CNJ-80	24V	68	In-ground	52.60	54.60	32.9x34.4x27.3	36x40x30.5
XGS322 24V/100Ah IP68 gel bat sys 5yrs	911401818002	6-CNJ-100	24V	68	In-ground	60.00	62.00	32.9x34.4x27.3	36x40x30.5
XGS322 24V/120Ah IP68 gel bat sys 5yrs	911401818102	6-CNJ-120	24V	68	In-ground	75.00	77.00	40.6x34.8x26.6	43.5x40x30.3
XGS322 24V/150Ah IP68 gel bat sys 5yrs	911401818202	6-CNJ-150	24V	68	In-ground	85.00	87.00	48x34x30	51x40x33.5
XGS322 24V/180Ah IP68 gel bat sys 5yrs	911401818302	6-CNJ-180	24V	68	In-ground	112.00	115.00	52.2x47.6x21.8	53.5x50.6x3.2
XGS322 24V/200Ah IP68 gel bat sys 5yrs	911401818402	6-CNJ-200	24V	68	In-ground	118.00	122.00	52.2x47.6x21.8	53.5x50.6x3.2
XGS322 24V/220Ah IP68 gel bat sys 5yrs	911401818502	6-CNJ-220	24V	68	In-ground	119.00	123.00	52.2x47.6x21.8	5.5x50.6x32
XGS322 24V/250Ah IP68 gel bat sys 5yrs	911401818602	6-CNJ-250	24V	68	In-ground	136.00	140.00	52x53.8x22	53.5x56.8x3.2





Solar Battery Subsystem

-LiFePO4 battery

Lithium ferro phosphate battery integrates highly efficient technology to get long service lifetime, high performance in deep discharging. It can be used in wide range of ambient temperature and keep good performance of constant power input.



Key Features

- In-pole, on-pole and in-ground installation
- Available in 12.8 V and 25.6 V systems
- IP68 rated waterproof battery
- Wide operating temperature range from 0 to 60°C
- Maintenance free with very long lifetime of more than 2000 deep cycles
- Low self-discharge rate of 1-2% per month*
- Stable and safe chemical performance
- No memory effect
- Eco-Friendly: Lithium ferro phosphate (LiFePO4) batteries contain relatively low levels of harmful metals
- CE certified

Connectors



Key Features

- With excellent aging resistance and UV endurance, it can be used in harsh environment.
- Environmentally sealed to IP67
- Ambient temperature range: -40~+85C
- Simple crimp-and-poke application
- Tactile and audible mating feedback

Specifications



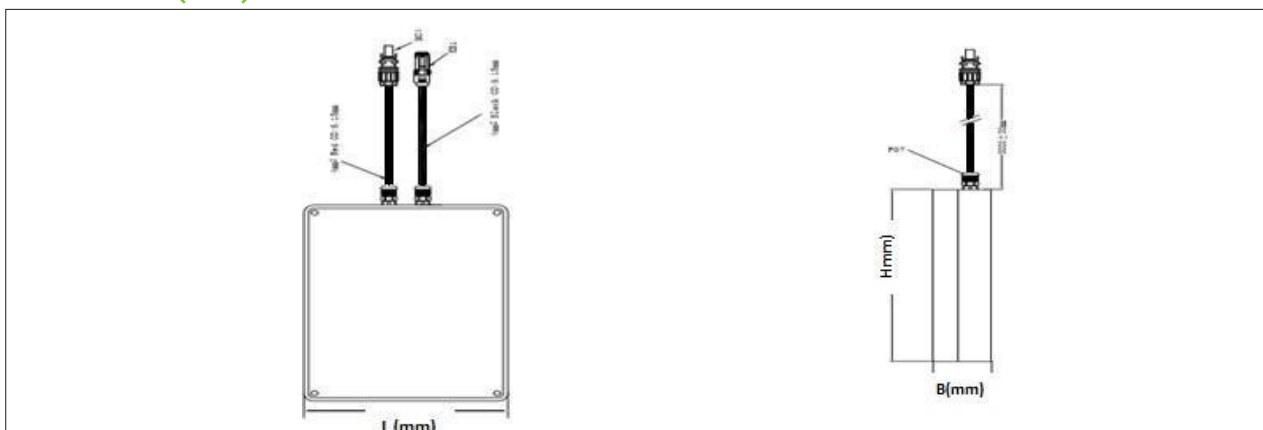
	ZJS601 50Ah	ZJS601 70Ah	ZJS601 80Ah	ZJS601 100Ah	ZJS601 120Ah
Battery Capacity	50Ah	70Ah	80Ah	100Ah	120Ah
Nominal voltage	12.8 V	12.8 V	12.8 V	12.8 V	12.8 V
Charging voltage	14.6V				
Working temperature range	Charge	0°C ~ 60°C			
	Discharge	-20°C ~ 60°C			
	Storage	-20°C ~ 35°C (3 month)			
Standard charge current	10.0 A	14.0 A	16.0 A	20.0 A	12.0 A
Max. continuous discharge current	20 A	20 A	20 A	20 A	20 A
Self-discharge current	< 2% per month				
Charge/Discharge Cycles	>2000 cycles				
IP Rating	IP68				

*Depends on site location

	ZJS601 50Ah	ZJS601 70Ah	ZJS601 80Ah	ZJS601 100Ah	ZJS601 120Ah
Weight (kgs)	7.4 kg	9.5 kg	10.5 kg	12.5 kg	16.5 kg
Dimension(HxWxL) (mm)	471*147*121	471*147*121	471*147*121	471*147*121	380*280*180
Type of connectors	KB1/MC4 connectors				
Cable length	Length: 3000mm ± 30 mm Diameter: 6.15 mm				
Mounting arrangement	Suitable for underground installation . Pole mounting kit also available as accessory				
Certifications	IEC 61960, CE				

	ZJS601 70Ah	ZJS601 80Ah	ZJS601 90Ah	ZJS601 100Ah	ZJS601 120Ah	ZJS601 150Ah	ZJS601 180Ah
Battery Capacity	70Ah	80Ah	90Ah	100Ah	120Ah	150Ah	180Ah
Nominal voltage	25.6V	25.6V	25.6V	25.6V	25.6V	25.6V	25.6V
Charging voltage	29.2 V (max.)						
Working temperature range	Charge	0°C ~ 60°C					
	Discharge	-20°C ~ 60°C					
	Storage	-20°C ~ 35°C (3 month)					
Standard charge current	14.0 A	16.0 A	18.0 A	20.0 A	24.0 A	15.0A	18.0 A
Max. continuous discharge current	25 A	25 A	25 A	25A	25 A	25 A	25 A
Self-discharge current	< 2% per month						
Charge/Discharge Cycles	>2000 cycles						
IP Rating	IP68						
Weight (kgs)	19.0 kg	21.5 kg	20.4 kg	22.0 kg	26.5 kg	41.2 kg	48.0 kg
Dimension(HxWxL) (mm)	380*280*180	380*280*180	485*280*160	485*280*160	485*280*160	480*420*160	480*420*160
Type of connectors	KB1/MC4 connectors						
Cable length	Length: 3000mm ± 30 mm Diameter: 6.15 mm						
Mounting arrangement	Suitable for underground installation . Pole mounting kit also available as accessory						
Certifications	IEC 61960, CE						

Dimensions (mm)



Order information

Item	Product description	12NC
Solar Lighting Battery	XGS701 12.8V 50AH LFP Battery SubSys	911401823002
Solar Lighting Battery	XGS701 12.8V 70AH LFP Battery SubSys	911401823102
Solar Lighting Battery	XGS701 12.8V 80AH LFP Battery SubSys	911401823202
Solar Lighting Battery	XGS701 12.8V 100AH LFP Battery SubSys	911401823302
Solar Lighting Battery	XGS701 12.8V 120AH LFP Battery SubSys	911401823402
Solar Lighting Battery	XGS702 25.6V 70AH LFP Battery SubSys	911401823502
Solar Lighting Battery	XGS702 25.6V 80AH LFP Battery SubSys	911401822302
Solar Lighting Battery	XGS702 25.6V 90AH LFP Battery SubSys	911401823602
Solar Lighting Battery	XGS702 25.6V 100AH LFP Battery SubSys	911401822402
Solar Lighting Battery	XGS702 25.6V 120AH LFP Battery SubSys	9114018223702
Solar Lighting Battery	XGS702 25.6V 130AH LFP Battery SubSys	911401822502
Solar Lighting Battery	XGS702 25.6V 150AH LFP Battery SubSys	911401823802
Solar Lighting Battery	XGS702 25.6V 160AH LFP Battery SubSys	911401822602
Solar Lighting Battery	XGS702 25.6V 180AH LFP Battery SubSys	911401823902
Steel case Accessory	ZGM701 Pole Mounting Kit B50-B100	911401824602
Steel case Accessory	ZGM701 Pole Mounting kit B120	911401824502
Steel case Accessory	ZGM702 Pole Mounting kit B70-B80	TBD
Steel case Accessory	ZGM02 Pole Mounting kit B90-B120	911401824402
Steel case Accessory	ZGM702 Pole Mounting kit B130-B180	911401824702





PV PanelSub-system

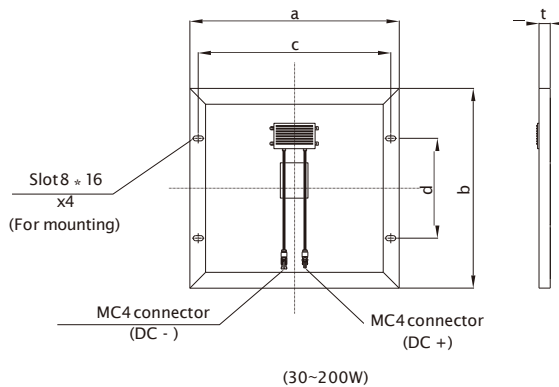
-Panel 30-315W



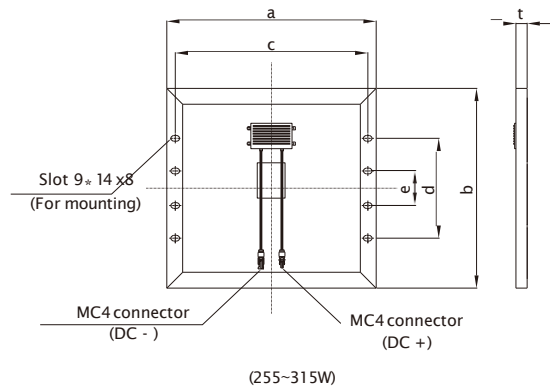
Designed for Philips Solar Lighting System; PV Panel sub-system include panel and connectors; Solar Panel utilizes poly-crystalline and mono-crystalline silicon solar cells that combines high Wp (Watts Peak) output, affordability and efficiency.

Key Features

- Robust quality managed by Philips quality discipline, supplied by world class manufacturers
- Customization available
- Plug and play design for easy connection and installation
- Operating temperature range : -40~+85. C
- TUV certification



(30~200W)



(255~315W)

(Installation position and dimensionreference)

Connectors



MC4



MC4

Key Features:

- With excellent aging resistance and UV endurance, it can be used in harsh environment.
- Environmentally sealed to IP67
- Ambient temperature range : -40~+85. C
- Simple crimp-and-poke application
- Tactile and audible mating feedback

Specifications

	Type No.	Pmax (W)	I _{mp} (A)	I _{sc} (A)	V _{mpp} (V)	V _{oc} (V)	Max wind load (Pa)
30W 17V Panel subsystem V _{mpp} 17.9V	YL30P-36B1/5	30	1.67	1.81	17.90	23.00	5400
55W 17V Panel subsystem V _{mpp} 18.39V	YL55P-36B1/3	55	2.99	3.25	18.39	23.31	
60W 17V Panel subsystem V _{mpp} 17.9V	YL60P-36B2/5	60	3.35	3.62	17.90	22.90	
75W 17V Panel subsystem V _{mpp} 17.89V	YL75P-36B1/2	75	4.19	4.39	17.89	23.33	
100W 17V Panel subsystem V _{mpp} 18.22V	YL100P-36B 2/3	100	5.34	6.28	18.82	22.81	

	Type No.	Pmax (W)	Imp (A)	Isc (A)	Vmpp (V)	Voc (V)	Max. wind load(Pa)
105W 17V Panel subsystem Vmpp 18V	YL105P-36B2/3	105	5.55	6.39	18.93	23.02	5400
115W 17V Panel subsystem Vmpp 18V	YL115P-36B3/4	115	6.42	6.88	18.00	23.01	
125W 17V Panel subsystem Vmpp 18.7V	YL125P-36B4/5	125	6.42	7.46	18.70	22.40	
130W 19V Panel subsystem Vmpp 20.16V	YL130P-40B3/4	130	6.45	6.89	20.16	25.85	
155W 17V Panel subsystem Vmpp 18.93V	YL155P-4-36B	155	8.19	8.60	18.93	24.08	
200W 36V Panel subsystem Vmpp 38.99V	YL200P-72B2/3	200	5.13	6.18	38.99	42.48	
310W 36V Panel subsystem Vmpp 37.13V	YL310P-4-72B	310	8.35	8.97	37.13	44.99	
315W 36V Panel subsystem Vmpp 37.37V	YL315P-4-72B	315	8.43	9.08	37.37	45.04	

	Efficiency	Cell Quantity	Net Wt.(kg)	a (mm)	b (mm)	c (mm)	d (mm)	t (mm)
30W 17V Panel subsystem Vmpp 17.9V	12.51%	4x9	3.0	666	360	625	180	35
55W 17V Panel subsystem Vmpp 18.39V	14.80%	4x9	4.2	666	558	625	280	35
60W 17V Panel subsystem Vmpp 17.9V	14.10%	4x9	5.0	666	639	625	329	35
75W 17V Panel subsystem Vmpp 17.89V	14.55%	4x9	6.0	666	774	625	400	35
100W 17V Panel subsystem Vmpp 18.22V	15.17%	4x9	8.2	666	990	625	720	35
105W 17V Panel subsystem Vmpp 18V	15.93%	4x9	8.2	666	990	625	720	35
115W 17V Panel subsystem Vmpp 18V	15.35%	4x9	8.8	666	1125	625	580	35
125W 17V Panel subsystem Vmpp 18.7V	16.33%	4x9	9.5	666	1195	625	620	35
130W 19V Panel subsystem Vmpp 20.16V	16.29%	4x10	9.8	666	1244	625	800	35
155W 17V Panel subsystem Vmpp 18.93V	16.28%	4x9	12.5	666	1476	625	902	35
200W 36V Panel subsystem Vmpp 38.99V	15.68%	6x12	15.5	992	1318	942	800	35
310W 36V Panel subsystem Vmpp 37.13V	15.98%	6x12	23.5	992	1956	942	1676	40
315W 36V Panel subsystem Vmpp 37.37V	16.23%	6x12	23.5	992	1956	942	1676	40

Order information

Product description	12NC
30W 17V Panel subsystem Vmpp 17.9V	911401803402
55W 17V Panel subsystem Vmpp 18.39V	911401803202
60W 17V Panel subsystem Vmpp 17.9V	911401803102
75W 17V Panel subsystem Vmpp 17.89V	911401803302
100W 17V Panel subsystem Vmpp 18.22V	911401803702
105W 17V Panel subsystem Vmpp 18V	911401803802
115W 17V Panel subsystem Vmpp 18V	911401803602
125W 17V Panel subsystem Vmpp 18.7V	911401803502
130W 19V Panel subsystem Vmpp 20.16V	911401804002
155W 17V Panel subsystem Vmpp 18.93V	911401803902
200W 36V Panel subsystem Vmpp 38.99V	911401893501
310W 36V Panel subsystem Vmpp 37.13V	911401804502
315W 36V Panel subsystem Vmpp 37.37V	911401804402



PV Panel Sub-system

Vertical solar panel is based on modular conception which can be easily mounted to any kind of pole. Has a flexible modular design with much aesthetical appearance and it has a great performance in wind resistance than regular solar panel. A unique amalgamation of aesthetics, IoT, performance and modern design. Illuminate and beautify the roads with vertical panel solar street light.

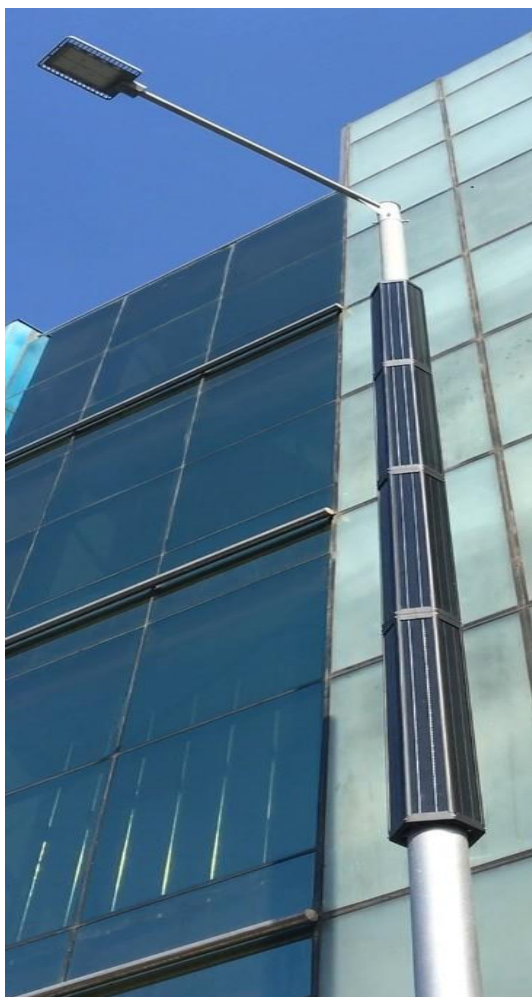
Vertical panel is a breakthrough innovation for solar lighting application in cities. Its artistic design beautifies city centers like shopping malls, commercial blocks as well as campus, parks and residential areas.

Key Features

- Plug and play design for easy installation
- Remote Monitoring available

Benefits:

- No dust accumulation lead to increased performance rate
- Has high wind resistance
- Aesthetically better since there is no extended panel
- Can fit on existing poles*



Applications

- Class A and B roads
- Industries
- Campuses
- Parks

Specifications

Model number	Q100		Q140		Q190	
Pmax	100W		140W		190W	
Vmp	18V	36V	18V	36V	18V	36V
Imp	5.56A	2.78A	7.78A	3.89A	10.56A	5.28A
Cell type	Monocrystalline					
Material	Aluminium+tempered glass					
IP Rate	IP65					
Solar cell efficiency	>20.5%					
Cable type	2.5mm ² with MC4					
Operating temperature	-40°C~+80°C					

* Pole diameter should be compatible with panel dimensions



Cable Sub-system

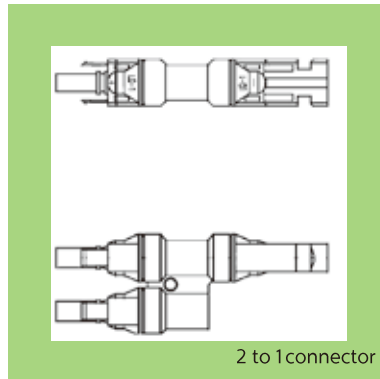
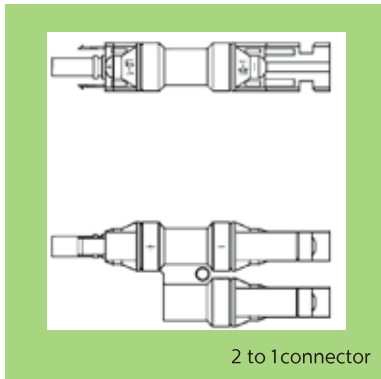
- PV Cable Sub-system

PV cable sub-system is designed for connecting PV panel and solar Charge Controller, Plug and Play connector ensures high reliability.

Triplet (2 male plugs and 1 female plug)

Triplet (1 male plug and 2 female plugs)

PV Panel Cable



Specifications



Cable Wire Size	4mm ²
Maximum working voltage	DC1000V
Rated Current	30A
Flame class	UL94-V0
Shell Protection degree	IP67
Ambient temperature range	-40~+85. C
Safety Level	Class II
Insertion force	≤50N
Withdrawal force	≤50N
Cable length	12.5m/11m/7.5m/9m/6m/3.5m

Order information

Product description	12NC	Cable length (m)	Triplet
12.5m/4mm ² PV cable w/o 2to1 connector	911401817601	12.5	No
11m/4mm ² PV cable w/o 2to1 connector	911401817301	11	No
9.5m/4mm ² PV cable w/o 2to1 connector	911401882601	9.5	No
7.5m/4mm ² PV cable w/o 2to1 connector	911401817201	7.5	No
6m/4mm ² PV cable w/o 2to1 connector	911401826501	6	No
3.5m/4mm ² PV cable w/o 2to1 connector	911401826601	3.5	No
12.5m/4mm ² PV cable with 2to1 connector	911401817101	12.5	Yes
11m/4mm ² PV cable with 2to1 connector	911401817001	11	Yes
9.5m/4mm ² PV cable with 2to1 connector	911401882701	9.5	Yes
7.5m/4mm ² PV cable with 2to1 connector	911401816901	7.5	Yes
6m/4mm ² PV cable with 2to1 connector	911401826401	6	Yes
3.5m/4mm ² PV cable with 2to1 connector	911401826701	3.5	Yes
2 CC to 1 battery connection kit	911401899801		



Remote Monitoring Unit (RMU)



Luminaire control Unit(LCU)



Central control Unit (CCU)

Solar Remote Monitoring Units (RMU) is a breakthrough solution for Off- Grid solar street lighting. It records system operation data, which can be used for energy reporting, environment and sustainable report, system state-of-the health; RMU enables real-time remote control, updating dimming profile, remote programming and upgrading. The friendly user interface of software is easy for you to manage solar lights remotely.

RMU comprises of :

- ✓ LUMINAIRE CONTROL UNIT(LCU): An outdoor luminaire controller and solar information connection distribution device based on ZigBee communication, it gets data and sends commands to solar charge

Benefits:

- Monitor health of critical components of the Solar lighting system
- Remotely control the solar street lights, individually or in groups
- Logs energy data for analysis of system performance
- Remotely optimize the dimming profile of street lights according to the changing solar irradiance in various seasons
- Make the solar street light system Smart city ready with data access through API's

controller via RS485 port

- ✓ CENTRAL CONTROL UNIT(CCU): A GRPS / 4G device that acts as communication gateway between the LCU and RMS to send/receive ZIGBEE packets
- ✓ REMOTE MONITORING SOFTWARE: Solar control software running on a server or cloud of servers it controls multiple segments through GPRS connection

The device is designed to be compatible with international standards like EIA-709.1, EIA-709.2, EN50065-1, IEEE 802.15.4 (ZIGBEE), and provide communication interface with other industrial standard (such as Modbus, etc.) for secondary development, product upgrade open interface.

- Real time alerts to minimize outages
- Easy installation through plug and play single cable connection

Functions:

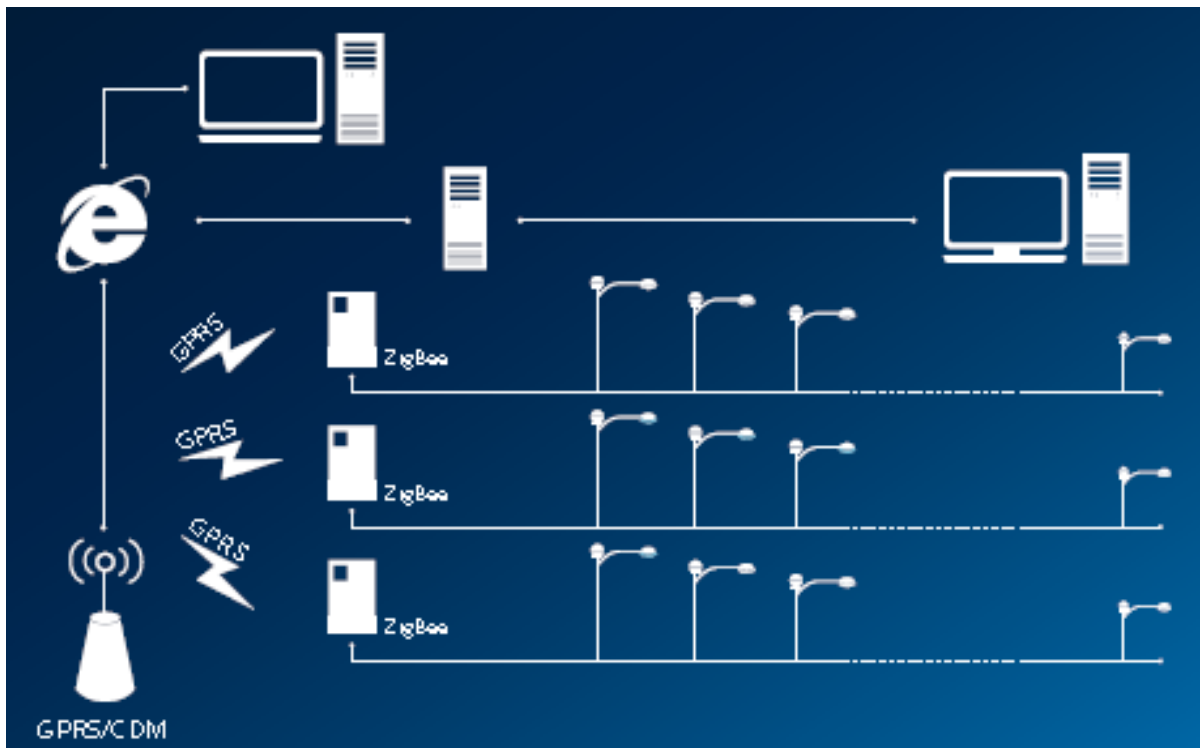
- Remote data logging;
- System working status monitoring;
- System fault detection/warning;
- Data report export;
- Energy consumption report;
- Two version: AES 128 encryption

Specifications:

Parameters	LCU	CCU
Power consumption	1.3W	300mW
No of LCUs to CCUs	40	1
Ambient temperature Range	-10°C to +65°C	
Ingress protection	IP65	
Dimensions (LxBxH) (mm)	65 x 85 x 25	170 x 100 x 80
Connection Type	CCU- GPRS/4G network Pole to pole- Zigbee LCU to CC- Single RS485 port	

Order information:

Item	Description	12NC
LCU	Solar RM LCU A128	911401892601
CCU	Solar RM CCU A128	911401892701
Accessory	RMU to CC Connection Cable	911401896901





Solar Indoor Portfolio

- Lifelight

Solar lantern for offgrid communities with mobile charging facility and optional AC charging. By harnessing the abundant energy from the sun, these LED lanterns deliver free and clean lighting along with additional facility to charge mobile phones.



Lifelight Plus 200lm



Lifelight 110lm

Benefits

- Long lasting lantern with clean and soothing white light with diffuser that ensures surround light
- Choice of different lighting levels to suit different activities and extended duration of usage.
- Replaceable lithium ferro phosphate battery
- Facility to charge mobile phones via USB cables
- Optional facility to charge the lamp with AC power in case of low sunlight
- LED indications for battery charging
- Adjustable handle for ease of use
- Robust IP65, water and dust proof construction.

Specifications:

Specifications	Lifelight	LifeLight Plus
Lamp	LED, white light	LED, white light
LED lumen (at max brightness)	110 lumen	200 lumen
CRI of illumination	>80	
Battery Chemistry	Lithium Ferro Phosphate	
Battery Capacity	1500+ mAh, 3.2 V	3000 mAh, 3.2 V
Solar Panel	5v and 1.6W with frame & tilt stand	4Wp, 5V/0.8A with frame and IP44 frame
Solar Panel Cable	3 meters	3 meters
Charging Electronics	MPPT	MPPT
USB port	Output Voltage 5V (with output current of 0.5 A)	
Run time duration	110 lumen : 05 hours 50 lumen : 10 hours 25 lumen : 20 hours (Runtime vary due to mobile charging function and level of battery)	200 lumen : 05 hours 100 lumen : 10 hours 50 lumen : 20 hours (Runtime vary due to mobile charging function and level of battery)
IP rating	Solar Lantern: IP65; Impact resistant, Water resistant Solar Panel : IP44	
Serviceability	Battery Replaceable	Battery Replaceable

Order information:

Description	12NC
SOLAR LAMP LIFE LIGHT	919515812374
SOLAR LAMP LIFE LIGHT-WC	919515812647
Solar Life Light standalone	919615811161
Solar Lamp Lifelight Plus	919515812909
Solar Lamp Lifelight Plus –WC	919515812908
Solar Lamp Lifelight Plus-Standalone	919515813014



Solar Indoor Portfolio

-SIS Compact

Solar indoor system for communities without access to electricity or with unreliable power supply. By harnessing the abundant energy from the sun, these systems deliver free and clean power to multiple lamps and appliances enhancing the lifestyles of remote communities.



Benefits

- Brings light to areas without access to electric grid or unreliable power supply
- Saves energy
- Extends lifestyles beyond sunset and improves comfort during the day
- Environment friendly
- Sturdy construction for long life
- Applicable to homes as well as business establishments
- Mobile charging via USB port

Features

- Highly Efficient and long life LED light sources
- Easy to operate - Single button dimming and ON/OFF controls
- Highly efficient MPPT charge controllers for maximising run time and built in protection circuits for long life.
- Long lasting replaceable lithium ferro phosphate battery in all portable lamps
- Charges mobile phones safely

Specifications

Specifications	Solar Indoor System Compact 400 3.3	Solar Indoor System Compact 300.2.1
Lamp	3W LED x 4	2.5 W LED x 4
LED lumen (at max brightness)	400 lumen each	300 lumen each
CCT of illumination	6500K	
Battery Chemistry	12.8V Lithium-iron phosphate	
Battery Capacity	21Wh	13.4 Wh
Solar Panel	35Wp/12V monocrystalline	35Wp/12V monocrystalline
Cable system	PV to Splitter: 5mtrs Splitter to Lamp : 5 mtr DC jack to mini USB with hanging switch	
Housing	ABS	
Splitter box	6 ports : 1 PV input/ 4 lamps /1 USB port 500 mA	
Run time duration	400 lumens: 5 hours 200 lumens: 10 hours 40lumens: 45 hours (Runtime vary as per user requirement)	300 lumens: 5 hours 150 lumens: 10 hours 30lumens: 50 hours (Runtime vary as per user requirement)
IP rating	Lamp : IP 20 Splitter : IP20 PV : IP65	
Serviceability	Battery Replaceable	

Order Information:

Product Description	12NC
SIS Compact 300 2.1	919515813190
SIS Compact 400 3.3	919515813189
Solar Indoor System Compact 400 3.3 2LU	919515813461
Solar Indoor System Compact 400 3.3 3LU	919515813462
SIS PV PANEL- 35W	919615899523



Solar Indoor Systems

-SIS 200 & SIS 30

Solar indoor system for communities without access to electricity or with unreliable power supply. By harnessing the abundant energy from the sun, these systems deliver free and clean power to multiple lamps and appliances enhancing the lifestyles of remote communities.



Key Features

- Highly Efficient and long life LED light sources
- Easy to operate - Single button dimming and ON/OFF controls
- Highly efficient MPPT charge controllers for maximising run time and built in protection circuits for long life.
- Long lasting replaceable lithium ferro phosphate battery in all portable lamps
- Intuitive display for ease of use
- Charges mobile phones safely
- Specific models with ability to power specific DC appliances

Benefits

- Brings light to areas without access to electric grid or unreliable power supply
- Saves energy
- Extends lifestyles beyond sunset and improves comfort during the day
- Environment friendly
- Sturdy construction for long life
- Applicable to homes as well as business establishments
- Mobile charging via USB port
- Specific models for powering DC appliances for enhancing lifestyles of remote communities

Specifications :

	SIS-30	SIS 200
Total Load	18Wmax (including DC Fan with max. 10W & mobile charging with max.5W/1A)	77W(including DC fan with max. 20W and 25W DC TV)
Battery capacity	10Ah	80Ah
Battery Type	12.8V LFP	12.8V, LFP
Charge controller	MPPT	MPPT
Solar Panel	30-60 Wp @17Vmp	200W @18Vmp
Load Connectors	4 no. of 2mm DC jack	5 no. of DC jack for lighting load and 2 no. of 2 pin socket for FAN/TV
Indications	-3 Green LED to show state of charge (SOC) - 1 Red LED for battery deep discharge indication	-4 LEDs, 2 Green & 1 Yellow LED for battery state of charging, Red for Fault of Battery Deep Discharged - LCD display
Run time duration (Runtime vary as per user requirement)	Full load: 5.5 hours approx.	Minimum 6-7 hrs per day with 2 days autonomy or as per user requirement
IP rating	IP20 for Box and IP65 for solar panel	
Fault Diagnosis	Yes, by indication LEDs	Indications by LED and LCD

Order information

Product description	12NC
SIS-30 Solar Indoor System	919515812941
SIS 40 Solar Indoor System KIT	919615899521
SIS 50 Solar Indoor System KIT	919615899522
SIS-200 Solar Indoor System	919515812907
BN 305C CW 5W 12V DC-WCS	919515812894
BN 305C CW 7W 12V DC-WCS	919515812895
Solar Equip BN 305C CW 3W 12V DC	919515811359
Solar Equip BN 305C CW 3W 12V DC-WCS	919515812893
Solar Equip BN 305C CW 5W 12V DC	919515811360
Solar Equip BN 305C CW 7W 12V DC	919515811361
Solar Equip BN 305C CW 7W 12V DC-LLB	919515812654
Solar Equip BN305C CW 7W 12V DC-WO	919515811668



