











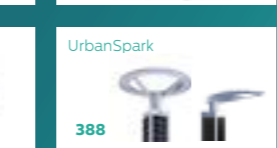
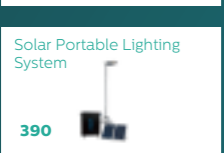



PHILIPS



MISBAH UNITED

Solar lighting

Say goodbye to darkness in the evening and costly electricity bills. Our solar-powered LED lighting solutions harness the sun's energy to provide high-quality illumination for indoor and outdoor applications. This breakthrough technology delivers a convenient, sustainable way to light your space with minimal investment and maintenance.

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PV Panels

PV Panel Sub-system

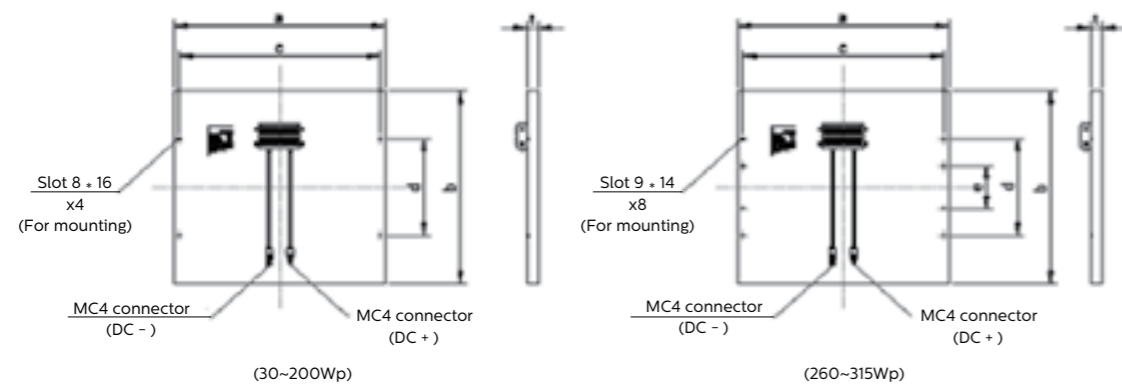
Designed for Philips Solar Lighting System; PV Panel sub-system include panel and connectors; Solar Panel utilizes poly-crystalline and mono-crystalline silicon solar cells that combines high Wp (Watts Peak) output, affordability and efficiency.

Features and Benefits

- Robust quality managed by Philips quality discipline, supplied by world class manufacturers
- Customization available
- Plug and play design for easy connection and installation

Product size

All dimensions in millimeters



Technical parameters

Module Type	Type No.	Power Output (P _{max} W)	Current at P _{max} (A)	Voltage at P _{max} (V)	Short circuit current (A)	Open circuit voltage (V)	Operating Temp (°C)	Max. wind load (Pa)
30W 17V Panel Subsystem Vmpp 17.9V	YL30P-36B 1/5	30	1.67	17.90	1.81	23.00	-40 to 85	5400
55W 17V Panel subsystem Vmpp 17.9V	YL55P-36B 1/3	55	2.99	18.39	3.25	23.31	-40 to 85	5400
60W 17V Panel subsystem Vmpp 17.9V	YL60P-36B 2/5	60	3.35	17.90	3.62	22.90	-40 to 85	5400
75W 17V Panel subsystem Vmpp 17.5V	YL75P-36B 1/2	75	4.19	17.89	4.39	23.33	-40 to 85	5400
100W 17V Panel subsystem Vmpp 18.6V	YL100P-36B 2/3	100	5.34	18.82	6.28	22.81	-40 to 85	5400
105W 17V Panel subsystem Vmpp 18.6V	YL105P-36B 2/3	105	5.55	18.93	6.39	23.02	-40 to 85	5400
115W 17V Panel subsystem Vmpp 17.7V	YL115P-36B 3/4	115	6.42	18.00	6.88	23.01	-40 to 85	5400
125W 17V Panel subsystem Vmpp 18.7V	YL125P-36B 4/5	125	6.42	18.70	7.46	22.40	-40 to 85	5400
130W 19V Panel subsystem Vmpp 19.9V	YL130P-40B 3/4	130	6.45	20.16	6.89	25.85	-40 to 85	5400
155W 17V Panel subsystem Vmpp 18.02V	YL155P-4-36B	155	8.19	18.93	8.60	24.08	-40 to 85	5400
200W 36V Panel subsystem Vmpp 38.7V	YL200P-72B 2/3	200	5.13	38.99	6.18	42.58	-40 to 85	5400
260W 30V Panel subsystem Vmpp 30.76V	YL260P-4-60B	260	8.47	30.72	8.99	37.86	-40 to 85	5400
265W 30V Panel subsystem Vmpp 31.03V	YL265P-4-60B	265	8.51	31.15	9.09	38.01	-40 to 85	5400
310W 36V Panel subsystem Vmpp 36.19V	YL310P-4-72B	310	8.35	37.13	8.97	44.99	-40 to 85	5400
315W 36V Panel subsystem Vmpp 36.29V	YL315P-4-72B	315	8.43	37.37	9.08	45.04	-40 to 85	5400

Physical dimensions

Module Type	Efficiency	Cell Quantity	Net Weight (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 17.9V	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 17.5V	14.55%	4x9	6.0	666	774	625	400	35
100W 17V Panel subsystem Vmpp 18.6V	15.17%	4x9	8.2	666	990	625	720	35
105W 17V Panel subsystem Vmpp 18.6V	15.93%	4x9	8.2	666	990	625	720	35
115W 17V Panel subsystem Vmpp 17.7V	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 19.9V	16.29%	4x10	9.8	666	1244	625	800	35
155W 17V Panel subsystem Vmpp 18.02V	16.28%	4x9	12.5	666	1476	625	902	35
200W 36V Panel subsystem Vmpp 38.7V	15.68%	6x12	15.5	992	1318	942	800	35
260W 30V Panel subsystem Vmpp 30.76V	15.98%	6x10	18.5	992	1640	942	1360	40
265W 30V Panel subsystem Vmpp 31.03V	16.29%	6x10	18.5	992	1640	942	1360	40
310W 36V Panel subsystem Vmpp 36.19V	15.98%	6x12	23.5	992	1956	942	1676	40
315W 36V Panel subsystem Vmpp 36.29V	16.23%	6x12	23.5	992	1956	942	1676	40

All the data above are tested in STC: AM=1.5, E=1000W/m², T_c=25°C

Connectors



Features and Benefits

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

PV Cable Sub-system

PV Panel Cable



Triplet (2 male plugs and 1 female plug)



Triplet (1 male plug and 2 female plugs)



PV cable sub-system is for connecting PV panel and Charge Controller, Plug and Play connector ensures the easy wiring, IP67 protection



Cable Specifications

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



In-ground Battery Subsystem

Reliable and affordable

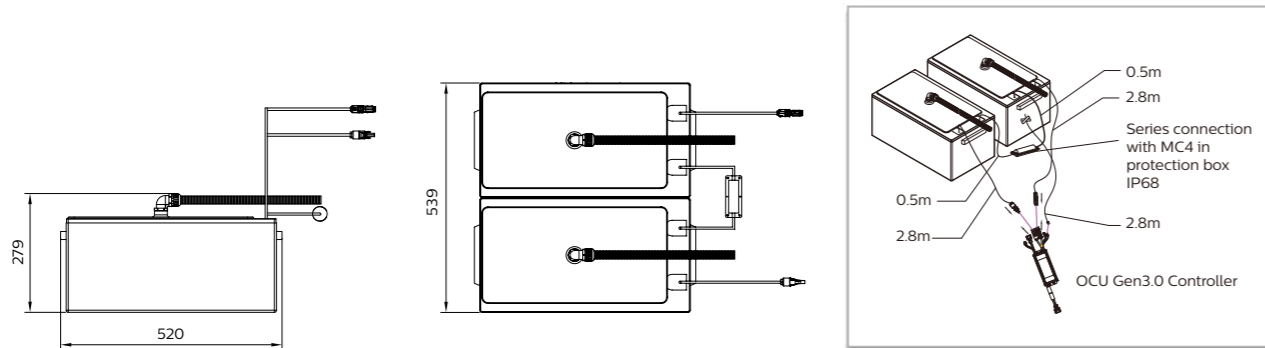
Value Regulated Lead Acid (VRLA) battery integrates Gel electrolyte technology to get long service lifetime, high performance in deep discharging. It can be used in wide range of ambient temperature and keep good performance of constant power input.

Features and Benefits

- Gel electrolyte, 12 years lifespan in float service application
- Excellent capacity restorability, 95% capacity will recover after short circuit in 24 hours
- Low self-discharge rate, less than 2% per month
- Wide application temperature range, -35°C-60°C
- High charge efficiency, good small current charge absorption ability
- IP68 housing, patent design, keep battery in good environment for longer application life time
- Ventilation pipe, release the gas from battery to the air for safe operation

Product size

All dimensions in millimeters



IP68

Specifications

	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V	BT12V
Battery capacity at 77°F (25°C)	65Ah	80Ah	100Ah	120Ah	150Ah	180Ah	200Ah	220Ah	250Ah
Related voltage	12V	12V	12V	12V	12V	12V	12V	12V	12V
Cells	6	6	6	6	6	6	6	6	6
Discharge rate @10hrs	6.5A, 10.8V	8.5A, 10.8V	10.0A, 10.8V	12.0A, 10.8V	15.0A, 10.8V	18.0A, 10.8V	20.0A, 10.8V	22.0A, 10.8V	25.0A, 10.8V
Average-self discharge rate, per month, 77°F (25°C)	≤ 2%								
Working temperature range	Charge				-20°C - 60°C				
	Discharge				-10°C - 60°C				
	Storage				-20°C - 60°C				
Max charge current	13A	17A	20A	24A	30A	36A	40A	44A	62.5A
Temperature compensation	18 - 24mV/ °C /pcs								

	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V	BT24V
Battery capacity at 77°F (25°C)	65Ah	80Ah	100Ah	120Ah	150Ah	180Ah	200Ah	220Ah	250Ah
Related voltage	24V	24V	24V	24V	24V	24V	24V	24V	24V
Cells	12	12	12	12	12	12	12	12	12
Discharge rate @10hrs	6.5A, 21.6V	8.5A, 21.6V	10.0A, 21.6V	12.0A, 21.6V	15.0A, 21.6V	18.0A, 21.6V	20.0A, 21.6V	22.0A, 21.6V	25.0A, 21.6V
Average-self discharge rate, per month, 77°F (25°C)	≤ 2%								
Working temperature range	Charge				-20°C - 60°C				
	Discharge				-10°C - 60°C				
	Storage				-20°C - 60°C				
Max charge current	13A	17A	20A	24A	30A	36A	40A	44A	50A
Temperature compensation	36 - 48mV/ °C /pcs								

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



Solar Off-Grid Control Unit (OCU) Gen 3.0

OCU Gen 3.0 with Maximum Power Point Tracking (MPPT CC ECO 13A)

Philips Solar Off-grid Control Unit (OCU) Gen 3.0 Charge Controller with Maximum Power Point Tracking (OCU Gen 3.0 MPPT CC) is an advanced battery charger for off-grid photovoltaic lighting system. The controller features a leading and smart tracking algorithm that maximizes the energy harvest from the PV and provides load control to prevent over discharge of the battery.

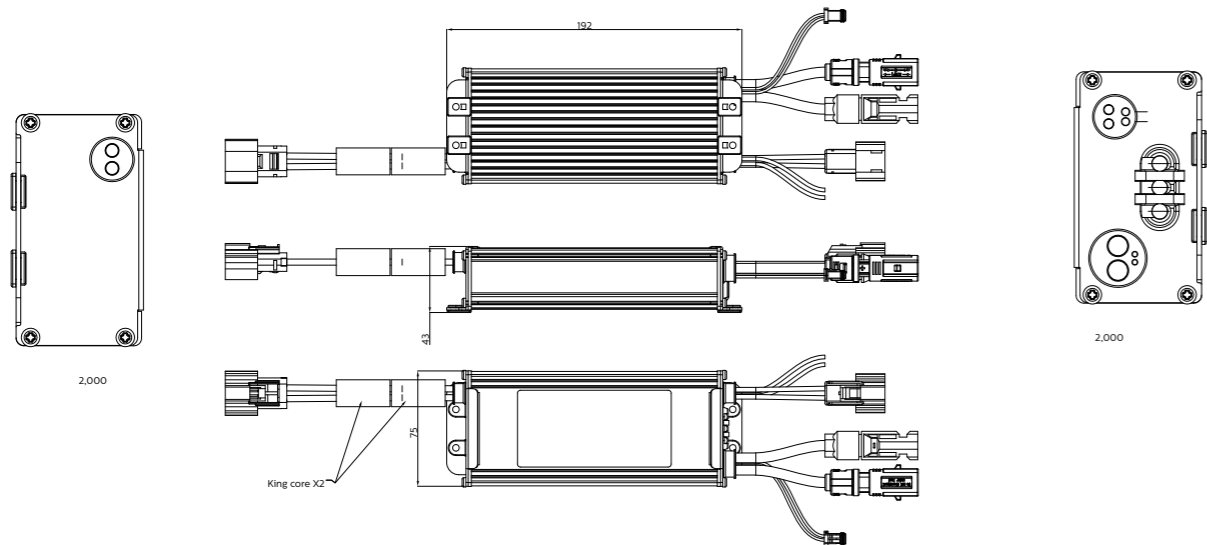
The OCU Gen 3.0 MPPT CC is dedicatedly designed for professional PV applications in standalone solar lighting system. The battery temperature sensor adhered to it and its charging process has been optimized for long battery life and improved system performance. The product is polyurethane encapsulated for environment protection and preventing against invasion (IP67), could be commissionable and accessible by users via a personal computer.

Features and Benefits

- Maximizes energy harvest
 - Dedicated design for solar lighting system
 - Lower system initial cost
 - Multiple working modes to applications
 - Slim size and fool-proof connectors
 - Highly reliable
 - Self-recovery ability
 - Automatic lighting control
 - Fully commissionable and accessible
 - Extensive electronic protections
 - Longer battery life and compatible with both lead acid and Li-ion battery
 - Easy visibility
 - Data* logging
- * (Panel VI, battery VIT, loads VI and daily harvest energy and power consumption)

Product size

All dimensions in millimeters



IP67

Technical parameters

Electrical	peak efficiency	97%
	self-consumption	<15mA(24V); <25mA(12V)
	recognition of multiple power peaks	Yes
	Nominal Battery Voltage	12V/24V auto work
	Max. Battery Current	13A
	Nominal Max. PV Input	12 volt battery system -190 Watts, 24 volt battery system - 380 Watts
	Battery Voltage Range	Maximum Battery Voltage 32V
	Max. PV Open Circuit Voltage	55V
Mechanical	Transient Surge Protection	PV Terminal: DM:2KV; CM:4KV
	Dimensions	192X75X43mm
	Weight	Eco: 970 ± 30g
	Power Terminal	2.5mm ²
Environmental	Enclosure	IP67
	Terminal	Plug-and-play
	Operating Temperature	-40°C - 60°C
	Storage Temperature	-40°C - 85°C
	Humidity	10% - 95% Non-condensation
	Tropicalization	polyurethane encapsulation
	Electronic Protections	PV Array Short Circuit, PV Overvoltage Load Overload, Load short circuit PV Reverse Polarity Battery Reverse Polarity High Voltage Transients Reverse Current at Night
Battery Charging	Battery Types	Flooded/Gel/AGM, LiFePO4
	4 Stage Charging	Lead Acid: 4-stage; LiFePO4: 2-stage
	Remote Temperature Sensor	Yes
	Temperature Compensation	Yes
	Cable Voltage Drop Compensation	Yes
	Coefficient	-25mV/°C for 12V battery
	Range	-35°C-60°C for Lead Acid, -20°C-60°C for discharging for LiFePO4, -5°C-60°C for charging
	Self-Recovery from system hibernate mode	Yes
Commissioning and Data Logging	RS485 port for commissioning and data reading Default 3Hours (1 week)[Range: 3Hours(1week)-24Hours(8weeks)], NVM size: 8 K Bytes Data logging frequency should be commissionable by commissioning tool	
	Automatic Lighting Control	Local Control Mode
Multiple Working Prole	General purpose (all time on) Dusk to dawn (default) (1 SKU) Pre-set timing (pre-set working hours triggered after dusk) (9 SKUs) Evening-morning working mode (pre-set working hours triggered after dusk and working hours last before dawn)	
	Warranty	standard warranty guideline
LED indications	LED indication for system status: Bat/PV/Load, battery capacity visible	
Standards	EN62109-1:2010 EN50530:2010-4+A1:2010-3 IEC 60529-1:2001 (Ed. 2.1) IEC 62109-1:2010 (clause 6.3)	
Certifications	CE/CQC/MPPT Efficiency RoHS & Reach Compliant Declaration IP67 test report	



Solar Off-Grid Control Unit (OCU) Gen 3.0

OCU Gen 3.0 with Maximum Power Point Tracking (MPPT CC Pro 13A)

Philips Solar Off-grid Control Unit (OCU) Gen 3.0 Charge Controller with Maximum Power Point Tracking (OCU Gen 3.0 MPPT CC) is a most leading solution in battery charger for off-grid solar lighting system. The controller features smart tracking algorithm that maximizes the energy harvest from the PV and provides load control to prevent over discharge of the battery. OCU Gen 3.0 MPPT CC Pro is able to work with Remote Monitoring Unit (RMU), the standalone solar lighting systems are networked and enable users to get system operation data remotely and further help predict systems healthy.

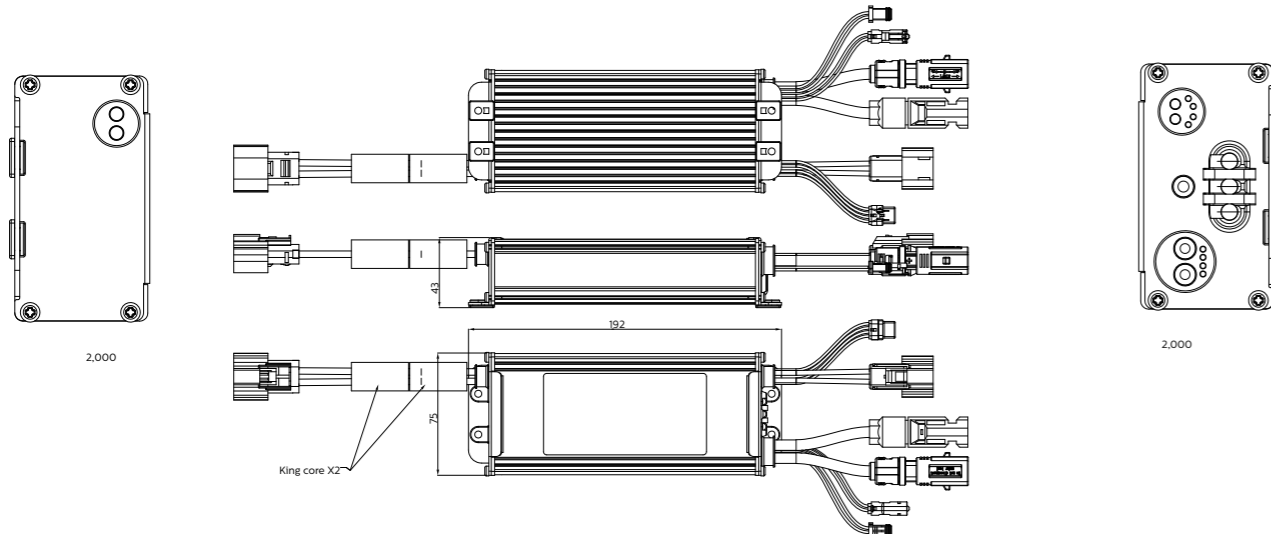
The OCU Gen 3.0 MPPT CC is dedicated designed for professional PV applications in standalone solar lighting system. The battery temperature sensor adhered to it and its charging process has been optimized for long battery life and improved system performance. The product is polyurethane encapsulated for environment protection and preventing against invasion (IP67), could be commissionable and accessible by users via a personal computer.

Features and Benefits

- Maximizes energy harvest
 - Dedicated design for solar lighting system
 - Lower system initial cost
 - Multiple working modes to applications
 - Slim size and fool-proof connectors
 - Highly reliable
 - Self-recovery ability
 - Automatic lighting control
 - Fully commissionable and accessible
 - Enhanced electronic protections
 - Longer battery life and compatible with both lead acid and Li-ion battery
 - Easy visibility
 - Data* logging
- * (Panel VI, battery VIT, loads VI and daily harvest energy and power consumption)

Product size

All dimensions in millimeters



IP67



Technical parameters

Electrical	Peak efficiency	97%	
	Self-consumption	<15mA(24V); <25mA(12V)	
	Recognition of multiple power peaks	Yes	
	Nominal Battery Voltage	12V/24V auto work	
	Max. Battery charge current	13A	
	Max. Battery discharge current	10A	
	Nominal Max. PV Input	12 volt battery system -190 watts peak, 24 volt battery system - 380 watts peak	
	Battery Voltage Range	Maximum Battery Voltage 31V	
	Max. PV Open Circuit Voltage	55V	
	Transient Surge Protection	PV Terminal: DM:2KV; CM:4KV	
Mechanical	Dimensions	192X75X43mm	
	Weight	Pro: 970 ± 30g	
	Power Terminal	2.5mm ²	
	Enclosure	IP67	
Environmental	Terminal	Plug-and-play	
	Operating Temperature	-40°C - 60°C	
	Storage Temperature	-40°C - 85°C	
	Humidity	10% - 95% Non-condensation	
	Tropicalization	polyurethane encapsulation	
	Electronic Protections	PV Array Short Circuit, PV Overvoltage Load Overload, Load short circuit PV Reverse Polarity Battery Reverse Polarity High voltage transients Reverse current at night	
		Battery Charging	Battery Types
	Battery Charging	4 Stage Charging	Lead Acid: 4-stage; LiFePO4: 2-stage
Remote Temperature Sensor		Yes	
Temperature Compensation		Yes	
Cable Voltage Drop Compensation		Yes	
Coefficient		-25mV/°C for 12V battery	
Range		-35°C-60°C for Lead Acid, -20°C-60°C for discharging for LiFePO4, -5°C-60°C for charging	
Self-Recovery from system hibernate mode		Yes	
Commissioning and Data Logging		RS485 port for commissioning and data reading Default 3Hours (1 week)[Range: 3Hours(1week)-24Hours(8weeks)], NVM size: 8 K Bytes Data logging frequency should be commissionable by commissioning tool	
		Automatic Lighting Control	Local Control Mode
Multiple Working Prole		Remove Monitoring Unit (RMU) General purpose (all time on) Dusk to dawn (default) (1 SKU) Pre-set timing (pre-set working hours triggered after dusk) (9 SKUs) Evening-morning working mode (pre-set working hours triggered after dusk and working hours last before dawn)	
	LED indications	LED indication for system status: Bat/PV/Load, battery capacity visible	
Standards	EN62109-1:2010 EN50530:2010-4+A1:2010-3 IEC 60529-1:2001 (Ed. 2.1) IEC 62109-1:2010 (clause 6.3)		
Certifications	CE/CQC/MPPT Efficiency RoHS & Reach Compliant Declaration IP67 test report		



Combo OCU MPPT

Integrated and High Efficiency Combo MPPT Charge Controller

Designed for solar lighting system applies to street lighting, pathways, sideways.

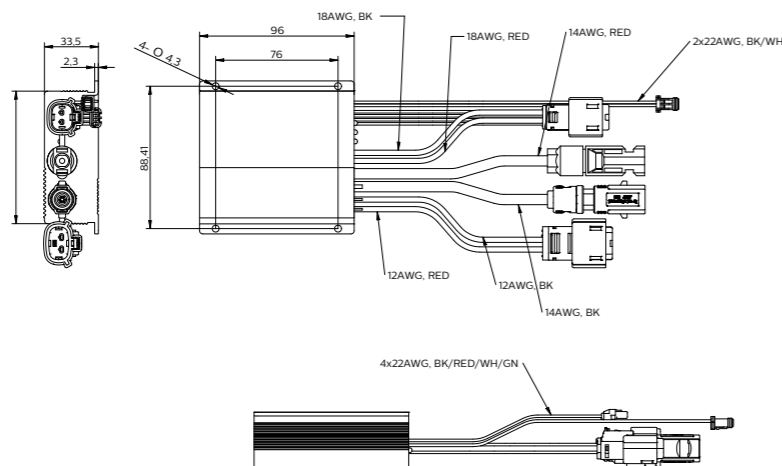
Value of driver and charge controller is low comparing to total cost of solar system, but they are key elements in the whole solution. Combo MPPT charge controller is a new innovation from Philips solar lighting, integrates function of driver and charge controller can optimize system performance.

Features and Benefits

- MPPT efficiency up to 99.5%, 10-15% higher than PWM
- Temperature compensation extends battery lifetime
- Working mode programmable for various application
- Support remote monitoring system for easy maintenance
- International certificate ensures product quality

Product size

All dimensions in millimeters



Note:
1. All materials comply to RoHS



IP68

Technical parameters

	Specification	Spec Limit
Input	Nomial solar input voltage	17.5V
	Max solar input voltage	30V
	CC efficiency	MPPT efficiency 99.5%
	CC efficiency	HW efficiency 96%
Output	Max charging current	13A
	Max charging power	190W
	Max output power (for LED load)	60W
	LED driver output current	100mA-1000mA
	LED driver output current accuracy	±3%
	LED driver output voltage	20V-60V
	max 6 dimming step	(programmable via RS485)
	RS485 power supply	12V 1A
	LED driver efficiency	94%
	Mechanical	Mechanical size (L x W x H)
Enclosure		IP68
PV terminal lead wire		(Red+/Blue-) 100mm, 2.5mm ² , tin-plated
Battery terminal lead wire		(Red+/Blue-) 100mm, 2.5mm ² , tin-plated
LED driver terminal lead wire		(Red+/Blue-) 100mm, 1.5mm ² , tin-plated
Terminal sensor lead wire		(Red+/Blue-) 100mm, 22# AWG
Protection	RS485±, 12V/GND	100mm, 4 x 22AWG, tin-plated
	PV terminal reverse	Yes (auto recovery)
	Bat terminal reverse	Yes (auto recovery)
	Bat short protection by fuse	Yes (30A)
	LED driver terminal short	Yes (latch)
Function	LED driver terminal open	Yes (latch)
	Power management: charge and protection	Battery type: Lead Acid (AGM/Gel)/LiFePO4
	Light management: working mode/lumistep/RTE	Lumistep/RTE
	Commisionable/monitorable/controllerable	Yes
	RS485 bus to support RMU	Yes
	LED indication	System health status
Other	Working temperature	-40°C to 60°C
	Design life	50,000 hrs
	Certificate	CE



System for solar lighting



Solar Off-Grid Control Unit (OCU) 20A

OCU with Maximum Power Point Tracking (MPPT CC 20A)

Philips Solar Off-grid Control Unit (OCU) Gen 3.0 Charge Controller with Maximum Power Point Tracking (OCU Gen 3.0 MPPT CC) is a most leading solution in battery charger for off-grid solar lighting system. The controller features smart tracking algorithm that maximizes the energy harvest from the PV and provides load control to prevent over discharge of the battery. OCU Gen 3.0 MPPT CC Pro is able to work with Remote Monitoring Unit (RMU), the standalone solar lighting systems are networked and enable users to get system operation data remotely and further help predict systems healthy.

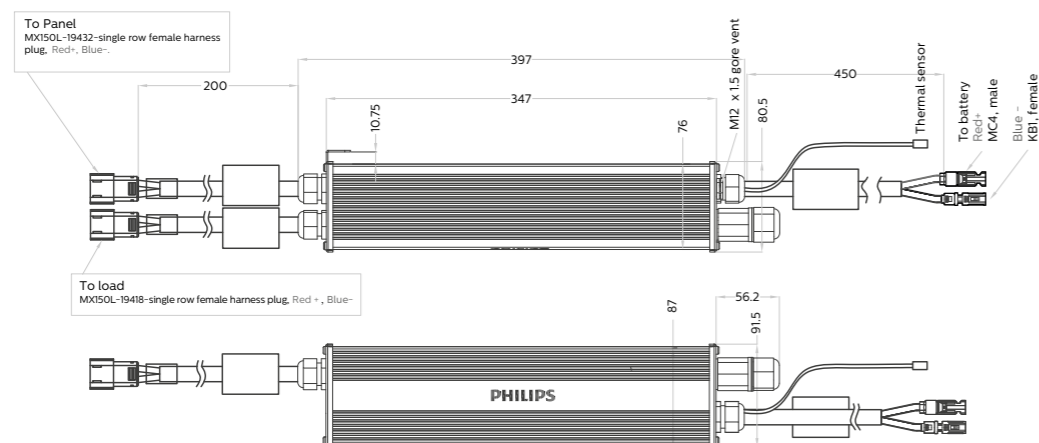
The OCU Gen 3.0 MPPT CC is dedicated designed for professional PV applications in standalone solar lighting system. The battery temperature sensor adhered to it and its charging process has been optimized for long battery life and improved system performance. The product is polyurethane encapsulated for environment protection and preventing against invasion (IP67), could be commissionable and accessible by users via a personal computer.

Features and Benefits

- Water-proof & dust-proof, system IP65 (terminal to AC mains excluded)
- Fool-proof and Plug and Play connectors
- Battery temperature compensation
- Slim design and easily installed inside of pole
- Intelligent lighting control with dusk/dawn detection and timer
- Wide working temperature range
- Good safety protection
- Multiple load work mode selection
- Settable priority on AC mains mode or battery mode
- External RS485 communication port, easy setting and remote control

Product size

All dimensions in millimeters



IP65

Technical parameters

Type	XJS301
Max. Charge Current	20A
Max. Discharge Current	10A
System voltage	12V/24V auto
IP	IP65
Battery over voltage protection	16V@12V, 32V@24V
Environment temp.	-30°C-60°C
System protection	Class I
Battery	GEL / AGM
Temperature compensation	-5mV/°C/2V cell
Anti-corrosion	500hrs salty-frog test passed
MPPT efficiency	Max. efficiency >99%
Weight (kg)	3.15



System for solar lighting



Solar Hybrid Control Unit Gen 2.0 (HCU)

HCU with Maximum Power Point Tracking (MPPT CC)

Philips Solar Off-grid Control Unit (OCU) Gen 3.0 Charge Controller with Maximum Power Point Tracking (OCU Gen 3.0 MPPT CC) is a most leading solution in battery charger for off-grid solar lighting system. The controller features smart tracking algorithm that maximizes the energy harvest from the PV and provides load control to prevent over discharge of the battery. OCU Gen 3.0 MPPT CC Pro is able to work with Remote Monitoring Unit (RMU), the standalone solar lighting systems are networked and enable users to get system operation data remotely and further help predict systems healthy.

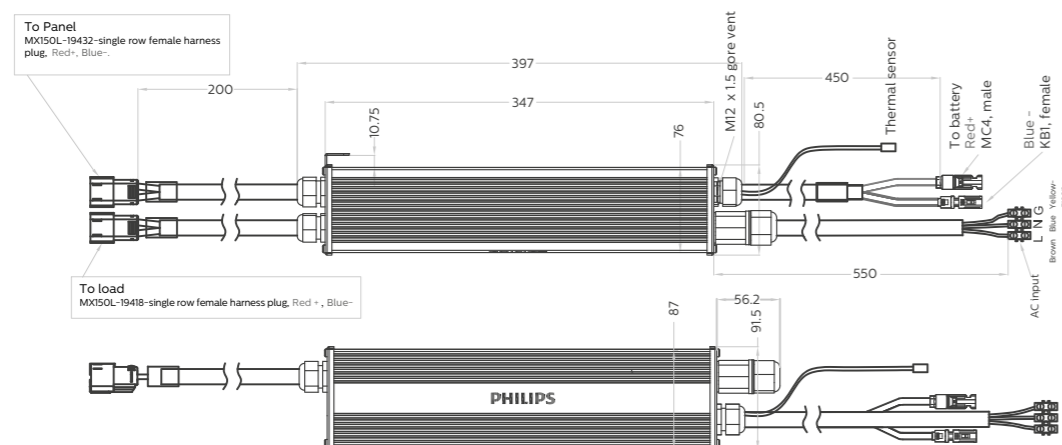
The OCU Gen 3.0 MPPT CC is dedicated designed for professional PV applications in standalone solar lighting system. The battery temperature sensor adhered to it and its charging process has been optimized for long battery life and improved system performance. The product is polyurethane encapsulated for environment protection and preventing against invasion (IP67), could be commissionable and accessible by users via a personal computer.

Features and Benefits

- Water-proof & dust-proof, system IP66 (terminal to AC mains excluded)
- Fool-proof and Plug and Play connectors
- Battery temperature compensation
- Slim design and easily installed inside of pole
- Automatically switches to AC mode once battery capacity is insufficient
- Intelligent lighting control with dusk/dawn detection and timer
- Wide working temperature range
- Higher surge protection level, up to 10KV
- AC mains could support load independently even without battery
- Load on/off time smart synchronization with AC mains signal
- Good safety protection
- Multiple load work mode selection
- Settable priority on AC mains mode or battery mode
- External RS485 communication port, easy setting and remote control

Product size

All dimensions in millimeters



IP66

Technical parameters

Max. Charge Current	20A
Max. Discharge Current	10A
Max. output power	135W@HCU-150B
System voltage	12V/24V auto
IP	IP66 (terminal to line voltage excluded)
Battery over voltage protection	16V@12V, 32V@24V
AC rated input voltage	100-240V AC 50/60Hz
SPD	differential mode: 3KV; common mode: 10KV
Environment temp.	-30°C-60°C
System protection	Class I
Battery	Gel/ Semi-Gel
Temperature compensation	-5mV/°C/2V cell
Anti-corrosion	500hrs salty-frog test passed
MPPT efficiency	Max. efficiency >99%
Weight (kg)	3.35



Sports and area



Tango G2 LED (Solar)

High performance

Tango G2 LED solar version is a general purpose LED flood lighting luminaire powered by solar energy for various lighting applications, such as area lighting, bill-board, community and other general applications. The Tango G2 LED flood light incorporates LED light source, optical system, heat sink and driver into one compact housing.

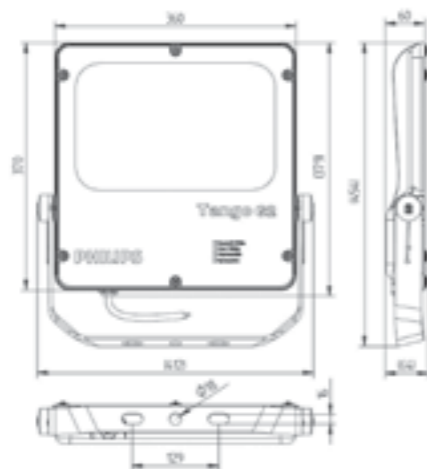
Its specially designed heat sink incorporates aesthetics and functionality to ensure reliability and long lifetime. It takes advantage of LED technology which provides energy savings and a longer lifetime, bringing area lighting into a new era.

Features and Benefits

- Energy saving**
 System efficacy reaches 100lm/W, which gives more than 40% of energy saving when compared to conventional floodlight
- Free from lamp replacement**
 Lifetime reaches 50,000 hours at L70, which requires no lamp replacement after installation
- Low maintenance cost**
 IP65 housing ensures low maintenance with no need for internal cleaning, resulting in a lower total cost of ownership
- Flexibility on lighting application**
 Optical beam choice of symmetric and asymmetric fulfils majority needs of lighting application
- Good reliability**
 Painted non-corrosive die-cast aluminum housing and steel bracket gives extra strength when the luminaire is installed in a rough environment
- Easy installation and maintenance**
 Universal "U" shape mounting bracket

Product size

All dimensions in millimeters



IP65

50Khrs

100
lm/W

Technical parameters

Type	BVP281
Light source	Mid Power LED
Input Voltage	12/24V, 24V
Power Consumption	40W; 60W; 80W; 120W
System lumen output	4,400; 7,200; 9,200; 13,200 lumen
CRI	Min. 80%
Color Temperature (CCT)	6500K
Optics	SWB – Symmetric
Materials and finishing	Housing: Die-cast aluminum (ADC1) Gasket: Heat resistant silicone rubber Glass: Tempered glass Housing Colour: Grey Aluminium RAL9007
Lumen Maintenance (*)	50,000 hrs L70 @ 35°C
Installation	Universal Bracket
Dimensions (LxBxH)	370 x 360 x 60mm
Weight	6.0 – 6.5 kg
Classifications	IP65; IK07; Class I; RoHS
Operating Temperature	-40°C to 50°C
Surge protection	Yes
Certifications	CB, CE, Photobiological safety
Ordering information	BVP281 LED44/CW 40W 12/24V S-WB SD 9.5 BVP281 LED72/CW 60W 24V S-WB SD 9.5 BVP281 LED92/CW 80W 24V S-WB SD 9.5 BVP281 LED132/CW 120W 24V S-WB SD 9.5



StreetStar (Solar)

Your streets. Your Star

The Philips StreetStar LED luminaire brings visually arresting brilliance and safety to local road and residential lighting projects. An optimized, long-lasting, and reliable solution that meets maximized operations and maintenance savings, this luminaire is the perfect synergy of performance, features, and value that will light up your way.

StreetStar is designed to perfectly fit one-to-one retrofit projects while catering to all lighting requirements. It provides crisp, brilliant light that surpasses existing HID and fluorescent luminaire performance while offering a long lifespan of up to 50,000 hours. Backed by the Philips reliability promise, StreetStar ensures mechanical strength and excellent thermal performance, providing continuous operation and unparalleled safety and protection.

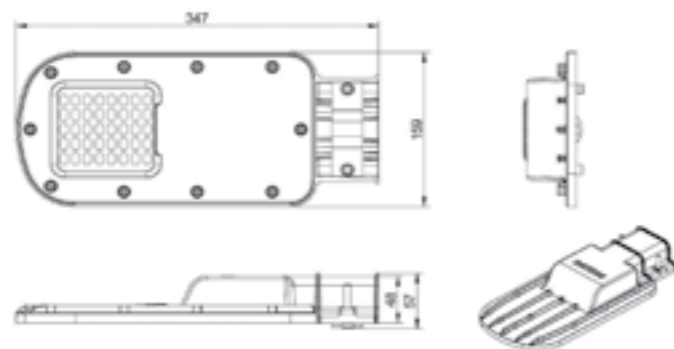
StreetStar is the perfect cost-effective solution for any city, municipality, and utility lighting projects that need optimum quality, performance, and low maintenance.

Features and Benefits

- Optimal light quality. Lighting consistency that outperforms current HID and fluorescent luminaire
- Reliable performance. Backed by Philips quality standards to ensure durability and functionality
- Meets standard lighting specifications. Competitive option for low lumen package street lighting that meets all IEC 60598 requirements
- Easy to install. Compact design for quick and easy point-to-point replacement of fluorescent and HID street lights
- Long lasting, low maintenance, and cost-effective. Low-power LED lighting with long lifespan to provide significant cost savings

Product size

All dimensions in millimeters



IP66 50Khrs 128 lm/W

Technical parameters

Type	BRP210
Input Voltage	12V DC
System lumen output	NW: 2300lm, 2800lm, 3400lm CW: 2300lm, 2800lm, 3400lm
System efficacy	121lm/W - 128lm/W
CRI	Min 70%
Color Temperature (CCT)	4000K(NW), 5700K(CW)
Optics	DW3 MP1
Materials and finishing	Housing: Die-cast aluminum; Gasket: Heat resistant silicone rubber Frame: Gray Paint RAL7040;
Operating temperature	-40°C < Ta < 55°C
Lumen Maintenance (*)	50,000 hrs L70 @ 35°C
Installation	Ø40-60mm pole, side entry
Dimensions (LxBxH)	347x159x57mm
Weight	1.1kg
Classifications	IP66; IK08; Class III
Controls	Fixed output
Certifications	CE; CB; IEC 62471
Cable length	7.5m
Preferred selection	BRP210 LED34-MP1/NW 28W 12V DW3 BRP210 LED28-MP1/NW 23W 12V DW3 BRP210 LED23-MP1/NW 18W 12V DW3 BRP210 LED34-MP1/CW 28W 12V DW3 7.5 BRP210 LED28-MP1/CW 23W 12V DW3 7.5 BRP210 LED23-MP1/CW 18W 12V DW3 7.5 BRP210 LED34-MP1/NW 28W 12V DW3 7.5 BRP210 LED28-MP1/NW 23W 12V DW3 7.5 BRP210 LED23-MP1/NW 18W 12V DW3 7.5



GreenVision Xceed (Solar)

Make roads safer

Lighting up streets and roads enhances the comfort, security and overall safety of our rapidly growing urban environments. Philips Solar GreenVision Xceed makes an affordable solar LED road lighting solution that delivers sufficient light on your roads.

It is designed to achieve better light uniformity and maximum spacing between poles for both pedestrian and vehicle road applications, and higher efficiency to save panel size and battery capacity in solar lighting system. With its die-cast aluminum housing and Philips LED platform, it is easy to maintain, has a long lifetime and a consistency you can count on. It also offers 3 housing sizes and a range of beam optics to fully cater to different road configurations and conditions.

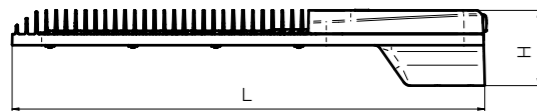
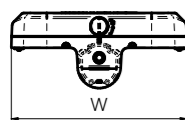
Owing to the Philips latest hybrid charge controller, it still could work on AC grid. GreenVision Xceed offers 30% of cost savings compared to outdated solar lighting, making it the perfect sustainable lighting solution for any emerging metropolis.

Features and Benefits

- Maximized energy savings**
 Maximized energy saving with full compliance to road lighting safety standards due to the dedicated lens with accurate design
 Superior W/m² performance delivered through different optics for greater flexibility to fit different road applications
- Reliable and future proof**
 Solid die-cast housing design with high ingress protection (IP66) and excellent thermal management ensure long life time for fixture
 World class, fully approbated quality components (LED's/drivers/etc.)
 Tool-less opening of the housing and plug play design bring easy maintenance
- Safety and comfort**
 Complies fully with M1 to M5 safety and road lighting standards in terms of luminance, uniformity and glare control
 High quality neutral white light with high color consistency

Product size

All dimensions in millimeters



NO.	Type	LWH=AxBxC(mm)
1	Small version	422x318x136
2	Middle version	522x318x136
3	Large version	853X318X136



IP66 50Khrs 150 lm/W

Technical parameters

Type	BRP371, BRP372, BRP373
Input Voltage	12V/24V DC; 24V DC
System lumen output	NW: up to 15000lm CW: up to 15000lm
System efficacy	Up to 150lm/W
CRI	Min 70%
Color Temperature (CCT)	4000K(NW), 5700K(CW)
Optics	Distribution Medium (DM)
Materials and finishing	Housing: Die-cast ADC1 aluminum Gasket: Heat resistant silicone rubber Glass: Tempered Glass with higher transmittance; Frame: Gray Paint RAL7040; LED lens: Polycarbonate, SABIC2180T
Operating temperature	-40°C < Ta < 55°C
Lumen Maintenance (*)	50,000 hrs L70 @ 35°C
Installation	Ø40-60mm pole, side entry
Weight	BRP371=7kg, BRP372=9kg, BRP373=14kg
Classifications	IP66; IK08; Class I
Surge protection	2KV
Controls	Standalone dimming program
Maintenance	Tool-less opening of housing; Tool-less gear tray change
Certifications	CE; CB; IEC 62471
Cable length	9.5m-12.5m
Run Time Extension	Optional
Motion Sensor Mode	Optional
Ordering information	BRP373 LED150/CW 110W 24V DM SD 12.5 BRP372 LED150/CW 116W 24V DM SD 12.5 BRP371 LED117/CW 95W 24V DM SD 12.5 BRP371 LED103/CW 83W 24V DM SD 12.5 BRP371 LED90/CW 76W 12/24V DM SD 12.5 BRP371 LED75/CW 60W 12/24V DM SD 12.5 BRP371 LED65/CW 51W 12/24V DM SD 12.5 BRP371 LED55/CW 43W 12/24V DM SD 9.5 BRP373 LED150/NW 116W 24V DM SD 12.5 BRP372 LED150/NW 116W 24V DM SD 12.5 BRP371 LED117/NW 95W 24V DM SD 12.5 BRP371 LED103/NW 83W 24V DM SD 12.5 BRP371 LED90/NW 76W 12/24V DM SD 12.5 BRP371 LED75/NW 60W 12/24V DM SD 12.5 BRP371 LED55/NW 43W 12/24V DM SD 9.5 BRP372 LED60/CW 39W 12/24V DM SD 9.5 BRP371 LED30/CW 19W 12/24V DM SD 7.5



RoadFlair (Solar)

Sleek and superior beyond anticipation

Designed for main roads, street and path, Philips Solar RoadFlair is a new and exciting product set to brighten your streets beyond imagination. Smartly-designed system can bring free energy to rural areas and cities the nice and safe environment.

Super high lumen efficiency makes the cost of whole solar system significant lower than before.

Philips solar system coupled with RoadFlair, improves a country's sustainability drive and matches clean energy strategy.

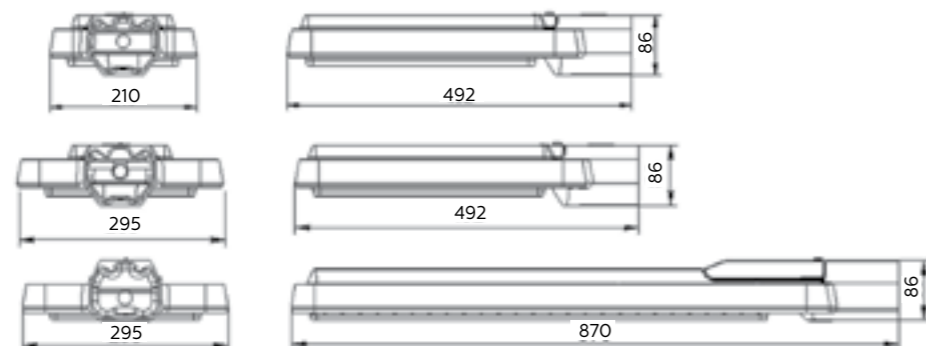
With the help of application, expert will create the best environment for your municipality, benefiting local communities and boosting tourism and business.

Features and Benefits

- High lumen efficiency**
 140 to 160 lumen per watt – much higher than currently available solutions
- Unique functional design**
 Sleek, light-weight and well-designed luminaire
- Control and dimming ready**
 Supports stand alone dimming functions
- Value for money / most competitive product in its segment**
 Perfect for renovation, upgrading projects. Best in class
 LED lighting technology at an unmatched, competitive price

Product size

All dimensions in millimeters



IP66 50Khrs 160 lm/W

Technical parameters

Type	BRP391/392/394
Lumen Maintenance (*)	50,000 hrs L70 @ 35°C
TM21 Projection	100,000 hrs L80 @ 35°C
Optic	Distribution Medium (DM)
IP	IP66
SDCM	5
Light source	LED
LED driver	Programmable driver
System lumen output (lm)	Up to 15,000 lumen
CRI	Min 70%
Color Temperature (CCT)	CW-5000K
Input Voltage	12/24V DC
Drive current	100mA - 1000mA
Installation	Ø42-60mm pole, side entry
Operating temperature	- 40°C < Ta < 50°C
Relative humidity	Up to 95% RH
Housing Material	High pressure die-cast aluminum heat
Gasket material	Resistant silicone rubber
Cover	Transparent and weather resistant grade polycarbonate
Finishing	Gray Paint RAL7040
Dimensions(LxWxH)	BRP391: 492x210x86 mm; BRP392: 492x295x86 mm; BRP394: 870x295x86 mm
Weight	BRP391: 5kg; BRP392: 7kg; BRP394: 10kg
Certifications	CB IEC 60598
Classifications	IP66; IK08; Class I; RoHS
Control Options	Standalone dimming program

Ordering information
 BRP391 LED15/CW 9W 12/24V DM SD 7.5M
 BRP391 LED30/CW 20W 12/24V DM SD 7.5M
 BRP392 LED45/CW 28W 12/24V DM SD 9.5M
 BRP392 LED60/CW 40W 12/24V DM SD 9.5M
 BRP392 LED75/CW 51W 12/24V DM SD 12.5M
 BRP392 LED90/CW 64W 12/24V DM SD 12.5M
 BRP394 LED105/CW 68W 12/24V DM SD 12.5M
 BRP394 LED120/CW 78W 24V DM SD 12.5M
 BRP394 LED135/CW 88W 24V DM SD 12.5M
 BRP394 LED150/CW 100W 24V DM SD 12.5M



UrbanSpark

Innovative solar solution for your city

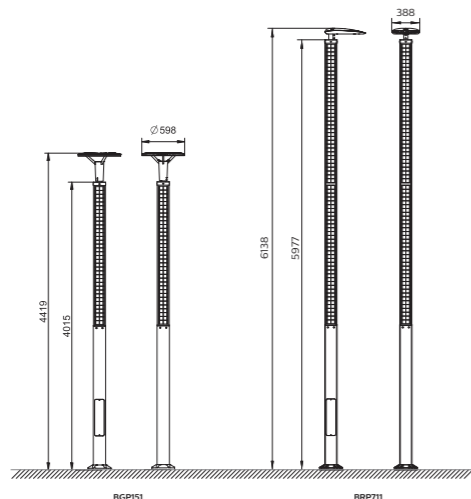
Solar energy is green and renewable. UrbanSpark is a solar integrated lighting system requires no energy from the grid. It's a 100% energy saving lighting solution. More and more cities look for recyclable solar energy, traditional solar lighting system can't match style of cities either modern or classic. UrbanSpark is a breakthrough innovation for solar lighting application in cities. Its artistic designing beautify city centers like shopping malls, commercial blocks as well as campus, parks and residential areas. With UrbanSpark, creates distinctive and harmonious circumstance for citizens and tourists, enhancing well-being and making cities more livable. There is no trenching and grid cabling work on site. Modular design, plug and play connection lead to easy installation. Long design life time of PV panel, LiFePO4 battery and LED luminaire, save maintenance cost.

Features and Benefits

- 100% energy efficient and no need on electricity
- No trenching and grid cabling work on site
- Automatic on/off according to day light and weather conditions
- Aesthetics design to beautify the surroundings
- Robust design to handle harsh conditions like sand, dust and snow
- Professional lighting effect to create safety & comfort
- Easy plug & play installation
- Integration design, a complete system that can be installed quickly with minimum installation costs and lowest total cost of ownership
- LiFePO4 battery has long lifespan, lower system cost over the entire life cycle

Product size

All dimensions in millimeters



Technical parameters				
		Post Top	Post Top	Street
Luminaire	Luminaire	BGP151	BGP161	BRP711
	Maximum luminous flux	2000lm	2500lm	6000lm
	CCT; CRI	CCT=4000K; CRI>70%	CCT=4000K; CRI>70%	CCT=5000K; CRI>70%
	Standard light profile	6H 100% + 6H 50%	6H 100% + 6H 50%	6H 100% + 6H 50%
	Typ. service life of LEDs	> 50,000 hours	> 50,000 hours	> 50,000 hours
LiFePO4 battery	Battery technology	LiFePO4	LiFePO4	LiFePO4
	Battery capacity	60Ah	60Ah	100Ah
	Life cycles	2000 cycles @ 90% DOD	2000 cycles @ 90% DOD	2000 cycles @ 90% DOD
	IP	IP68	IP68	IP68
	Operating temperature	-0 to 60 °C	-0 to 60 °C	-0 to 60 °C
	Dimension	120x146x470mm	120x146x470mm	120x146x470mm
	Weight	8.5Kg	8.5Kg	12.2Kg
PV module	PV cell technology	mono-Si	mono-Si	mono-Si
	Watt peak rating per module	180 Wp/23Voc	180 Wp/23Voc	180 Wp/23Voc
	Solar cell efficiency (under STC)	16.40%	16.40%	16.40%
	Number of strings	4	4	8
	String topology	parallel	parallel	parallel
	PV module lifespan	20 years	20 years	20 years
	Dimension	172x172x2000mm	172x172x2000mm	172x172x4000mm
Power management	Programmable per application scenarios	Yes	Yes	Yes
	Dynamic light prole customer-specific	Yes	Yes	Yes
	Run time extension	Yes	Yes	Yes
	Remote monitoring (LCU)	Yes	Yes	Yes
	Column	Total column length	4m	4m
Aluminium bottom part		2m	2m	2m
Solar PV module		2m	2m	4m
Size of square column		172x172mm	172x172mm	172x172mm
Construction material		Aluminium alloy	Aluminium alloy	Aluminium alloy
Aluminum surface finish		Powder painting	Powder painting	Powder painting
Security		Special locking mechanism	Special locking mechanism	Special locking mechanism
Total nominal peak power output		180 Wp	180 Wp	360 Wp
Light poles certificates		EN 40-6	EN 40-6	EN 40-6
CE certificate		Yes	Yes	Yes



Solar Portable Lighting System

Solar Portable Lighting system gives your LIGHT AS YOU GO, which is a easy-to-go solar powered lighting designed to provide sufficient and consistent excellent light anywhere and anytime for outdoor lighting, it is the ideal solution for mining field, community, emergency lighting, beach, as well as road lighting etc.

Features and Benefits

- Easy-to-go and portable system
- Robust design and making for any conditions
- Quick installation in 10 minutes
- Max 3m high installation and 0~45° adjustable luminaire
- High quality PV panel and battery
- Sufficient and quality light from Philips LED technology
- Quick charging and long lasting working hours
- Full certified components

Product details



50Khrs 110 lm/W



Technical parameters

Tripod	Material	Aluminum
	Coating	Gray powder, RAL 7040, available for customized color
	Weight	9.5Kg
	Pole height (fully extended)	3m
	Mast sections	2 * 50cm for extension
	Stabilizer legs - extending	3 * 50cm
PV Panel	Installation	manual winch (and for extension)
	Type	Poly crystalline
	Wp	60Wp
	Installation	Panel holder
	Tilt angle	Manual adjustable tilt 0°~45° with screw pins
	Certificates	TUV
Charge controller	OCU Gen 1+ 5A	Charge / Discharge current Max 5A
	Full electrical protection design	Yes
	Float Voltage	13.8V (25°C)
	Boost Voltage	14.4 V (25°C), 2h
	Boost Cycle	Activation If battery voltage goes below 12.3 V
	Equalization Voltage	12.8 (25°C), 2h
	Equalization Cycle	Activation If battery voltage goes below 12.1 V
	Additional Equalization	Every 30 days
	Load Reconnect Voltage	12.8 V
	Battery over voltage protection	15.5 V
	Emergency Switch O	< 10.5 V
	Max. Solar Voltage	55 V, by varistor
	Temperature Compensation	-4.2 mV/K per cell
	Supported battery Type	VRLA
	Installation	plug-and-play
	BRP330	LED Luminaire
	Certificates	CE
	Luminaire	Lumen output
Wattage		14W
System efficacy		105lm/W± 5%
CRI		75% ± 5
Color Temperature (CCT)		4000K(NW)
Optics		DM2E
Materials and nishing		Housing: Die-cast aluminum; Gasket: Heat resistant silicone rubber Glass: Tempered Glass; Frame: Gray Paint RAL7040;
Operating temperature		-40°C< Ta< 50°C
Lumen Maintenance (*)		50,000 hours (LM70@Ta=35°C)
Installation		Ø48-60mm pole, side entry
Dimensions (LxBxH)		360x300x140mm
Weight		4.5kg
Windage area		0.12m2
Classifications		IP65; IK08; Class I;
Surge protection		SPD: 2KV
Controls		Standalone dimming program
Maintenance		Tool-less opening of housing;
Certifications		CE; CB; IEC 62471
Cables length	5m	
Tilt	manual adjustable Manual adjustable tilt 0°~45° with indicator.(5° step)	
Cables and connectors	Attached	
	Securing and Lifting:	2 tie-down/lift lugs, 3 screw pins
Suitcase	Housing	wooden plate with aluminum frame
	Dimension	817 mm x 632mm x 357mm
	Weight	14Kg
	Working temp.	-5°C~50°C
System	Voltage	12V
	Self supported hours	28 hours long lasting operation (based on 50Ah battery)
	Battery	55Ah 12V Gel
	USB	standard output 5V/500mA



Centralized Solar Systems

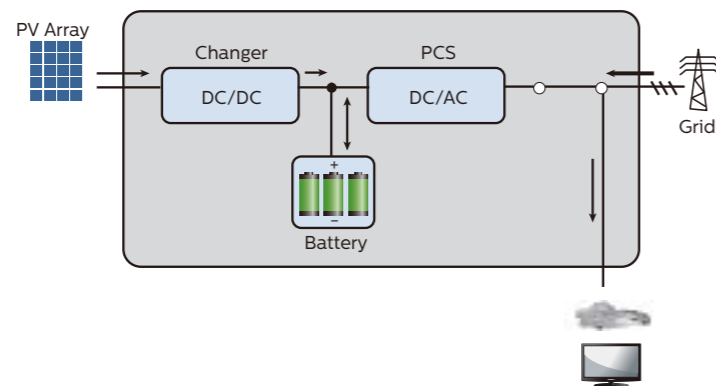
Philips Solar Centralized System is a leading energy system which generates and distributes power in areas without electricity or power underserved areas where you need to lit up the lightings and appliances.

The system offers long consistent power supply based on high quality Gel battery, MPPT photovoltaic charger, which brings long lifetime and low maintenance.

Features and Benefits

- Ideal both for off-grid and on-grid areas
- Excellent power management function
- Easy installation and low maintenance
- High security, stability and reliability
- Battery capacity extendable
- All-in-one electrical cabinet for easy installation
- Long life time battery pack with Gel battery
- 2 working modes to meet different application requirements (off-grid mode/hybrid mode)

System Principle Diagram



Technical parameters

Type	XWS301 SCS-P05B48
PV input terminal	3000W
MPPT Efficiency	99%
Battery Capacity	48V 48KWh max
Nominal Output Power	5.0KVA,4.0KW
Peak Output Power	1.5x Pnom,10sec
Output voltage	220Vac ±3%
Waveform	Pure sine wave
IP (Electrical Part)	IP20
Operating Temperature	-20 - 50°C

Order information

Description	Type no.	Product Size (mm)	Net Weight (Kg)	Package Size (mm)	Gross Weight (Kg)	Qty/ package
XWS301 SCS-P05B48	SCS-P05B48	120*300*500	14.5	170*350*550	16.5	1

Description	Type no.	Power Output Pmax W	Product Size (mm)	Net Weight (Kg)	Package Size (mm)	Gross Weight (Kg)	Qty/ package
255W 30V Panel	YL255P-30B	255	1640*992*40	18.5	1670*110*1022	39.7	2
260W 30V Panel	YL260P-30B	260	1640*992*40	18.5	1670*110*1022	39.7	2
310W 35V Panel	YL310P-36B	310	1956*992*40	23.5	1986*110*1022	50.5	2
305W 35V Panel	YL305P-36B	305	1956*992*40	23.5	1986*110*1022	50.5	2

Description	Type no.	Product Size (mm)	Net Weight (Kg)	Package Size (mm)	Gross Weight (Kg)	Qty/ package
24PCS 2V 1000Ah Gel Battery	B48V5KWH	471*171*342	57	1195*1015*955	1400	24



Indoor Lighting Systems

SIS-Gen 1

Solar Indoor Lighting system with innovative design really brings most light to your living, which enables your visionary indoor activities come true in evening, not only lit up your classroom when you are reading, writing, working, but also you could have more household enjoying with powering mobile phone, listening to radio, even watching TV. In clinics, owing to the dedicatedly designed LED batten, the doctors can serve more patients' longer time.

Philips Solar indoor lighting system is freely maintained and easily installed, which are mainly composed of standard PV panel, standard battery pack (difference in size) that accommodates various high quality gel battery to power lighting and electrical devices (USB output), charge controller hub is detachable and able to be mounted on the wall.

LED E27 lamps and LED battens are optional in system, giving you more sufficient light during evening in comfort and simplicity.



Features and Benefits

- Sufficient and consistent light output and quality
- Long working hours up to 120 hours¹
- 3-year long designed life time and 2500 lifecycles of gel battery pack²
- 5-year long application time of LED lamps and battens
- Plug-and-play for easy mounting anywhere indoor room
- Robust design for convenient placing and carrying
- Controllable and independent switch for each lamp/output line
- Loading master switch on hub for one-touch turning on/off
- Power master switch on battery pack to stop battery discharging in stock
- Portable and removable battery pack for easy maintenance and upgrading
- Detachable hub for mounting on the wall
- LEDs on hub to indicate battery available capacity (3-stage Status of Capacity SOC)
- Intermittent buzzing alarm to battery capacity
- Leading technology in efficiency of charging and discharging of charge controller
- Full electric protection and over temperature protection in charge controller
- Standard USB ports on battery pack for mobile phone, radio, MP3 charging
- High quality diffused E27 lamps with broad light angle
- High quality LED battens with creative glass lm reflector to give a gradient and comfort light
- 7.5m long cable for lamps and battens flexible connection
- Full certified components

1. 3W LED lamp powered by 40Ah battery, real working hours will be much depend on different applications.

2. Based on depth-of-discharge of the battery at 25% per night.

SIS Battery subsystem includes battery pack and charge controller hub



Battery pack

Description	Battery pack-S	Battery pack-L
Equipped battery capacity (Ah)	8/12/14/24/40	50/65/80/100
Battery output voltage	12V	
Battery Type	Gel	
Design life time (years) ³	3 years (Ta=25°C)	
Life cycles (charge and discharge)	2500 cycles @ DoD 25%;	
Overloading protection	Yes	
Number of USB port	1	2
USB output current	500mA	
USB protection (short circuit protection)	>2A	
USB protection (over current protection)	750mA	
Net Weight (Kg) –big battery pack	See preferred selection	
Installation	On the ground/table	
Dimension mm (L*W*H)	see preferred selection	
Ingress protection	IP20	
Power master switch	Yes	
Handle for carry	on two sides of the battery box	
Housing of battery pack	PP Plastic and Extruded Aluminum	
Color & coating	PANTONE Black 6C and medium grey, PANTONE 430C, Matt plastic, and Anodized Aluminum	
Working temperature	0°C< Ta< 40°C	
Housing of battery pack, material	PP Plastic and Extruded Aluminum	
Panel cable	7.5m/2.5mm	
Battery cable	3m/2.5mm	
Package	Cartoon	
Package dimensions	See preferred selection	
Mounting instructions	Yes	
Package quantity	1 set / carton	
Certificates	CE	
Standards	EN 61427: IEC 61427	

Controller Hub subsystem

Current (charging/discharging)	10A DC
Voltage	12V DC
Output current for each port	1.5A
Number of ports	6 ports to lightings
Individual switch for each port	Yes
One touch switch lightings	Yes
Low voltage protection	11.5V-11.9V
Over current protection	Yes
Short circuit protection	Yes
Reverse polarity protection	Yes
Over temperature protection	50°C
Installation	Attached with battery pack or wall mounted
Dimension mm (L*W*H)	196*210*36
Ingress protection	IP20
Housing of battery pack, material	PP Plastic
Housing of controller, surface treatment	PANTONE Black 6C , Matt plastic
Battery capacity indication	LEDs indicating 3 phases
Battery capacity alarm	Yes
Buzz alarm function triggered range (SOC)	SOC3 , 5 BEEP/S until reset
Buzz alarm reset	Yes
Working temperature	0°C< Ta< 40°C
Package	Attached with battery sub-system
Mounting instructions	Attached with battery sub-system
Package quantity	1 set / carton
Certificates	CE
Standards	EN 62109-1, EN 61000-6-2, EN 61000-6-4, EN 55015, EN 61547

LED Lamps

Voltage	DC 12V
Wattage	3W,5W
Lumen output	240lm,400lm
Optics	PC diuser
Beam angle	180° downward
Color Temperature (CCT)	cool white, 6500K
CRI	80
Socket	E27
Lumen Maintenance (*)	15,000hrs @L70
Housing	Plastic, PBT
Net weight (g)	32g, 59g
Ingress protection	IP20
Working temperature	-20°C< Ta< 40°C
Package quantity	1 set / carton
Installation	Suspension
Certificates	CE
Standards	EN 62560 , EN 61547, EN 62471 , EN 61000-3-2, EN 62493 , EN 61000-3-3, EN 55015

3. Based on 8 working hours per night, 365 nights per year.



SIS-PF

Solar Indoor Lighting system

Solar Indoor Lighting system with innovative design really brings most light to your living, which enables your visionary indoor activities come true in evening, to lit up your classroom when you are reading, writing, working, but also you could have more household enjoying with powering mobile phone. Philips Solar indoor lighting system is freely maintained and easily installed, which are mainly composed of standard PV panel, standard battery pack (difference in size) that accommodates various high quality VRLA battery to power Lighting and electrical devices (USB output), dc 12V of cigarette lighter output is able to support car inverter (<150W) which could further support small AC supplied home appliance.

LED E27 lamps (3W and 5W) are optional in system, giving you more sufficient light during evening in comfort and simplicity.

Features and Benefits

- Maximizes energy harvest
- Sufficient and consistent light output and quality
- Long working hours up to 120 hours
- 3-year long designed life time
- 5-year long application time of LED lamps and batters
- Plug-and-play for easy mounting anywhere indoor room
- Robust design for convenient placing and carrying
- Controllable and independent switch for each lamp/output line
- Loading master switch on hub for one-touch turning on/off
- Power master switch on battery pack to stop battery discharging in stock
- Portable and removable battery pack for easy maintenance and upgrading
- Maximizes energy harvest
- Detachable hub for mounting on the wall
- LEDs on hub to indicate battery available capacity (4-stage Status of Capacity SOC)
- Intermittent buzzing alarm to battery capacity
- Leading technology in efficiency of charging and discharging of charge controller
- Full electric protection and over temperature protection in charge controller
- Standard USB ports on battery pack for mobile phone, radio, MP3 charging
- High quality diffused E27 lamps with broad light angle
- High quality LED batters with creative glass lm reflector to give a gradient and comfort light
- 7.5m long cable for lamps and batters flexible connection
- Full certified components



Battery pack

Description	Battery pack-S	Battery pack-L
Equipped battery capacity (Ah)	30/40	55/65/80/100
Battery output voltage	12V	
Battery Type	VRLA	
Design life time (years)*	3 years (Ta=25°C)	
Charging & discharging current capability	10A	20A
Over current, short circuit, reverse polarity protection	Yes	
Number of lighting channel ports	4	6
Number of USB port	1	2
USB output current	500mA	
USB protection (short circuit protection)	Yes	
USB protection (over current protection)	Yes	
12V cigarette lighter output (150W)	No	Yes
Installation	On the ground/table	
IP	IP20	
Power master switch	Yes	
Handle for carry	on two sides of the battery box	
Housing of battery pack	cold rolled steel plate	
Color & coating	PANTONE Black 6C, powder coating	
Working temperature (charging & discharging)	-10°C< Ta< 50°C	
Bulb cable included	9.2m/AWG22	
Bulb cable quantity	3pcs	5pcs
Certificates	CE	
Standards	EN 62109	