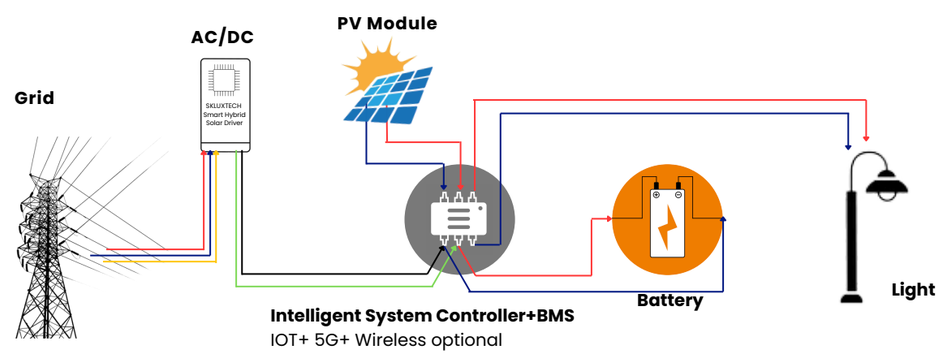
SOL É VIDA

PHOENIX GRID-TIED SOLAR STREET LIGHT

Hybrid Solar Street Light Connection Diagram



MOZELEC

Hyper Series- Grid Tied solar street light fixtures bring new innovations into the roadway and parking area illumination. Our patented optics maximize light distribution and placement with exceptional, low-glare with widely beam angle illumination in the intended area, Designed for installations and facilities friendly for the area's lack of power supply. High-grade aluminum ADC-12 housing with high-durability explosion-proof spray protection powder coating provides superior performance and longevity in virtually any environment. Hyper series offers outstanding long-life reliability to reduce energy and maintenance costs dramatically.

Superior Selection

TOP-CON PV Module

Innovated TOP-CON PV Module assure high efficiency in energy conversion, up to **24.3%** (Shingled PV module optional)

Battery Boost system

LIFEPO4 batteries deliver 2000+ times (10years) deep cycling life without significant excess capacity. This means a smaller, lighter and more attractive footprint. LIFEPO4 goes further by offering this benefit in freezing climates.

High integrated MPPT

MAX power track with 98% high efficiency conversion for effective energy charging and discharging, up to 30A current protection for system from high capacity design.

Hybrid LED System

1500 times per second observe solar off-grid system working status, Provides power support without delay when the off-grid system is under low voltage.

Structural Design

- ADC-12 Die-cast aluminum durability housing
- Pre-treated with high corrosion resistance before powder coating
- Thermal heat dissipation body for efficient temperature management
- Durable silicone rubber gasket for robust sealing
- High-efficiency PC lens for optimal light distribution, transparency up to 96%
- Surge protection up to- 20kV for reliability in varying conditions
- Offers Constant Lumen Output and Night-time dimming options for customizable illumination
- Fitting Smart System Control for advanced solar off-grid and Hybrid lighting management system.

Applications & Performance

- PHOENIX series Hybrid type solar street light is a multi-functional and versatile solar luminaire suitable for both street and urban applications.
- The product, designed according to high-quality standards, allows to create particular solar lighting scenarios thanks to the modular composition of its optics. Some modules, in fact, can be directed towards the opposite side of the road, in order to create backlit solutions

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Advantage of Hybrid Solar Lighting

- This light source is capable of handling higher power outputs, exhibiting minimal susceptibility to weather and environmental conditions.
- Additionally, it imposes low demands on batteries and battery boxes.

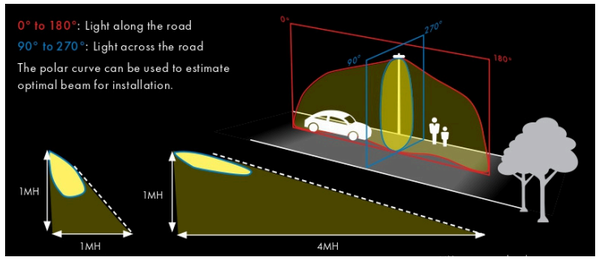
MOZELEC Hybrid Solar Lighting System Features

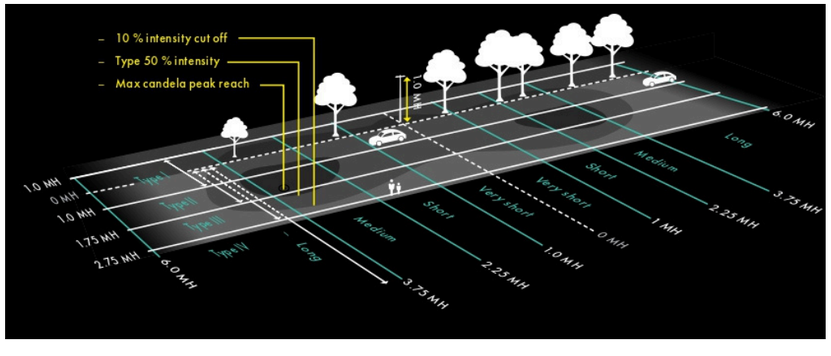
- High efficiency transaction from AC to DC and DC to AC, 1500 times per second observe solar off-grid system working status, Provides power support without delay when the off-grid system is under low voltage.
- Widely AC power range flexible fits the most application requirement for grid-tied output, available to working at large power and high lumen output.
- Available for longer days back up while system tracking working status, as solar first mode.

Optical Module - Focus On Light Uniformity

- **MOZELEC** optical systems are the result of an intensive R&D activities which has allowed the company to choose an alternative efficient solution, completely different from plastic material lenses. The reflection method adopted by **MOZELEC** during reflectors development, allows better and higher performance, reductions of glare effect and high visual comfort. **MOZELEC** studies have demonstrated that this material with pure alloy new surface finishing, assures important advantages for the optical system over time.
- The specific UV protection of the poly-carbonate Lens improves the life performance, guaranteeing long-term stability and perfect light transmission.

Luminous Intensity Distribution Diagram - TYPE II (70° * 150°)





MOZELEC

IEC CE RoHS COMPLIANT

General Specifications

FLUX	CRI	Light Source	System Voltage	Freq	CCT	Optical Lens	Power Factor	Safety
High Lumen +	Ra 70+ Ra 80+ Ra 90+	Philips Osram Bridgelux Cree	12.8V+ 25.6V+ Boost	50 ~ 60 HZ	2200K 3000K 4000K 5000K 6000K	Anti - UV PC & PMMA	0.95~0.98	Class I Class II Optional

Connect Dia Ø	Housing	Anti - Corrosion	IK	IP	Working Temp.	Lifespan	Beam
Ø 60 mm	Aluminum ADC-12	C5	IK 09	IP 66	-40 °C / +65 °C	50,000h 100.000h	Multiple

HOUSING COLOR

TAILORED COLOR

System Specifications

Ref.	LED Power	CCT	Flux	Beam	PV Module	Battery Cap.	AC Input	Anti-Surge	PF	Smart	Contr. Mode	Inst. Height
Product	(W)	(K)	(Lm)	(°)	(V - W)	(V - Wh)	(Vac)	(KV)				(M)
PHOENIX -S	**30W**	3000K	**5250Lm**	Type II	Mono 18V-80W	12.8V 384Wh	110V	4KV~ 20KV	>0.95	Hybrid + 220V	D2D	4~8m
	50W	4000K	**8990Lm**		Mono 18V-100W	12.8V 460Wh	/ 240V	On Request		Zigbee 2G/4G	Time Slot	5~9m
PHOENIX -M	**60W**	5000K	**11800Lm**		Mono 18V-120W	12.8V 844Wh				IOT-Smart City	Manual On-Off	6~12m
	80W	6000K	**14400Lm**		Mono 18V-260W	25.6V 1075Wh					Pay as you go	7~12m
PHOENIX -L	**60W**		**15200Lm**		Mono 18V-150W	12.8V 844Wh						8~12m
	80W		**15200Lm**		Mono 18V-280W	25.6V 1075Wh						9~12m
	100W		**18020Lm**		Mono 18V/36V-300W	25.6V 1536Wh						9~12m
	120W		**20400Lm**		Mono 36V-350W	25.6V 1843.2Wh						10~13m

*Tolerances: Flux ±10%. / ± 5% luminaire wattage

***MOZELEC Low Temperature Technology in working negative 43celsius on request**

Applications

Road | Industrial | Urban | Play Ground