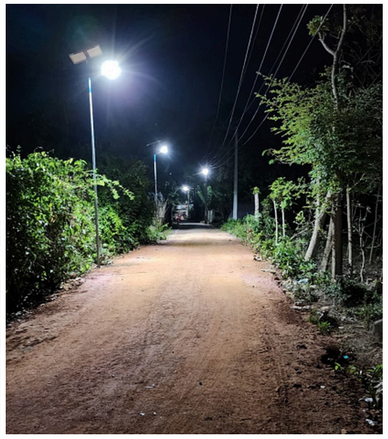
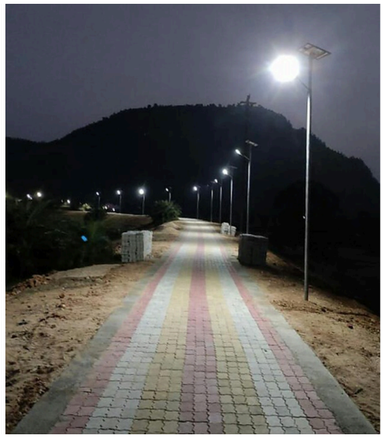






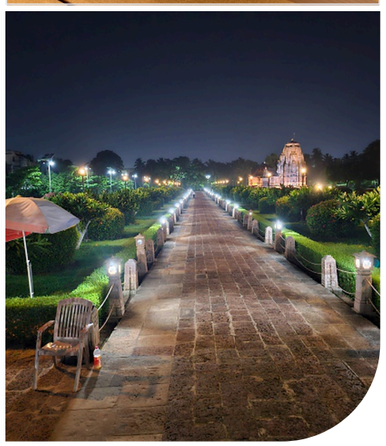












HELLOCON

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HELLOCON

ALL IN TWO

SOLAR

STREET LIGHT

20 W to 60 W | $LiFePO_4$ battery | MPPT charging | IP66

More
+Power
Less Expense



MSME सूक्ष्म, लघु एवं मध्यम उद्यम MICRO, SMALL & MEDIUM ENTERPRISES
ISO ISO9001 ISO ISO45001 ISO ISO14001
CE RoHS
IP66
NABL

01 MPPT Driver
Solar MPPT charging for weather-free operation

02 Dusk to Dawn
Automatic dusk-to-dawn switching



03 Smart Dimming
Programmed night-time dimming profile

04 LED
165 lm/W Philips / Osram LED

05 Safety
Short-circuit protection

06 LiFePO₄ Battery
High-efficiency lithium ferro phosphate battery

Solar Driver Specifications	
Driver configuration	MPPT
Nominal battery voltage	12.8 V
Maximum charging current	Matched to model
Maximum PV open-circuit voltage	25 V DC
PV voltage range	15–25 V
Standby power consumption	<10 mA
Solar panel (12 V)	75–165 Wp by model
Battery charging profile	CC / CV
Battery type	$LiFePO_4$
Battery charging cut-off voltage	14.6 V
Battery low cut-off	10.6 V
Power conversion efficiency	>93%
Battery reconnect	12.6 V
LED Driver Parameters	
Input voltage range	9–15 V DC
Light output	20–60 W by model
Dusk to dawn	Provided
Driver configuration	Buck
Regulated LED current	Provided
Conversion efficiency	>90%
Dimming	Provided
LED Indication	
Battery charging	Green
Battery low	Red
Error	Both blink

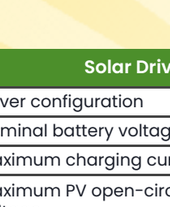
MPPT Controller

(Maximum Power Point Tracking)

HELLOCON uses MPPT charge control to deliver the maximum available charge to the lithium ferro phosphate battery. Charging efficiency can be up to 30% higher than PWM charging while the panel is in direct sunlight.



Solar panel collects sunlight and converts it to DC

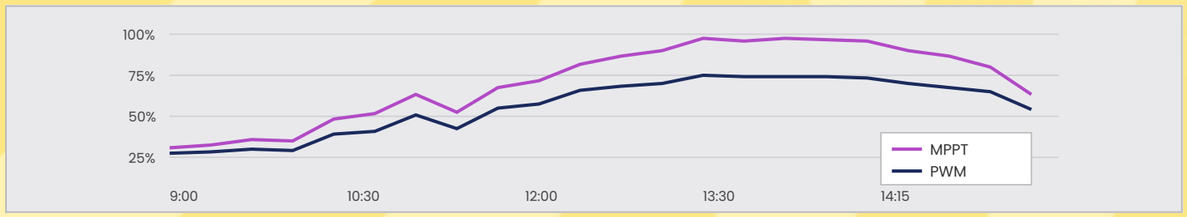


MPPT (maximum power point tracking) controller



Lower conversion losses, higher charging efficiency

Charging efficiency comparison (illustrative)





Battery Protection

Built to withstand harsh environments. HELLOCON lithium ferro phosphate batteries and their protection electronics work in heat up to 65 °C, and an optional thermal heating module keeps the lights operating in sub-freezing conditions as low as -10 °C. The battery packs use multi-level protection, so an individual cell group keeps working normally even in the unlikely event that another is damaged.

Powerful

ALL IN TWO SOLAR STREET LIGHT

All-in-Two solar street lights are designed for high-illumination areas such as highways, national roads, urban roads and airports. Bat-wing light distribution keeps the road brightly lit without dark patches between poles.

FEATURES

- Significant cost savings: no electrical cabling, distribution points, extra labour or digging.
- High durability: solar panels and LEDs last more than 10 years, while conventional sodium and CFL lamps usually need replacing at least once a year.
- Close to a month of time saved on new sites thanks to easy installation.
- Zero electricity cost.
- Environment-friendly and easy to dispose of, with no mercury or lead.
- Less heat dissipation and a higher colour temperature of light.
- Carbon credits and subsidies may be availed for large installations.
- A cleaner and greener environment to breathe.

Model No.	HSSL20	HSSL30	HSSL36	HSSL40	HSSL50	HSSL60
Light output	20 W	30 W	36 W	40 W	50 W	60 W
Solar panel (mono)	75 Wp	100 Wp	125 Wp	125 Wp	165 Wp	165 Wp
$LiFePO_4$ battery (12.8 V)	18 / 24 Ah	30 Ah	36 Ah	42 Ah	54 Ah	60 Ah
Nominal storage	230 / 307 Wh	384 Wh	461 Wh	538 Wh	691 Wh	768 Wh
Charge controller	MPPT charging					
LED efficacy	165 lm/W (LED)					
Light source	Philips / Osram					
CRI	70–82					
Body	High-pressure die-cast aluminium alloy					
Pole height	6–9 m, selected for the model and site					
Operating temperature	-10 °C to +65 °C					
Battery backup	2–3 nights (design target)					
Ingress protection	IP66					
Warranty	5 years					
Application	Residential areas, roads, parking lots, squares, parks, municipal, agriculture and aquaculture lighting					
Certificates	BIS, NABL, CE, RoHS, ISO					

20 W is offered with an 18 Ah or 24 Ah battery. Nominal storage = 12.8 V × Ah; usable energy is lower. LED efficacy is a component rating, not a measured whole-fixture lumen output. Backup depends on the dimming profile, solar charge and temperature. Final model, pole and warranty terms are confirmed in the quotation.