

## LED - SOLAR STREET LIGHT

# DEFINEWA Modular



1500 - 15000 LUMEN

OUTDOOR ILLUMINATION BY SOLAR POWER

## PERFECT SOLUTION FOR DIFFICULT LOCATIONS

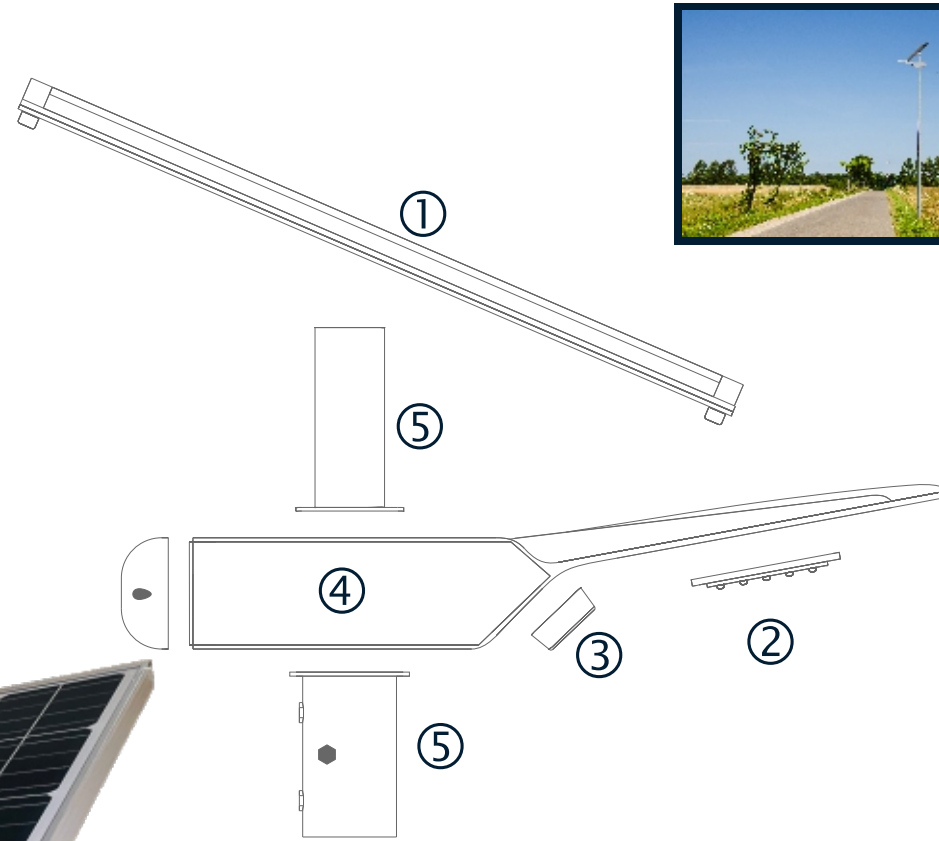
Compare to the Compact design, the Definewa Modular solar lamp is a Multi Purpose unit to optimise the solar power due a inadjustment of the solar panel.

The high-performance solar module is installed above the lamp housing. Due to the special connection piece, the inclination of the solar module and its position to the sun can be adjusted independend from the position of the lamp .This makes the installation of solar street lights much more flexible and high efficient

With a additional controll unit and some modifications on the lamp management system, the DEFINEWA Modular can work like a conventional LED-Street light with Grid connection (HYBRID SOLUTION) but with 90% less energy cost.

### UNIQUE DESIGN

- Lamp body in die-casting Aluminium with anti corrosion coating.
- Controller with special software for lamp and battery Management to increase lifetime of battery up to 10 years
- 3,2V charging system for a 5 times higher charging time and controlled discharge of 90% of capacity.



1. High Performance Solar Panel, Efficiency > 22%
2. LED-Chip with frame
3. Motion Sensor
4. Cast Aluminium Housing with Battery and MPPT Controller
5. Connection pieces to Panel and Pole



## FEATURES

- Solar Module: Monocrystalline high-performance module with cell-efficiency of more than 20%.
- LED Module: Powerful Bridgelux LED, luminous intensity up to 15000 Lumen
- Battery: Durable LiFePO4 energy storage. Free of toxic and polluting pollutants.
- Control unit: MPPT controller with intelligent programming of luminous intensity and time as well. Control of the solar module and battery management.
- Charging time: approx. 5 hours with sunshine.
- Light duration: Light duration without intermediate charge up to 24 hours (max mode) or up to 60 hours (dimming mode).
- Certificates: CE | RoHS | IP66 | CC, CCC.

## TECHNICAL DATA „DEFINEWA MODULAR“

Type	DSM 10.60	DSM 20.80	DSM 30.100	DSM 40.120	DSM 60.160
LED Chip	Bridgelux	Bridgelux	Bridgelux	Bridgelux	Bridgelux
LED Efficiency	160 L/W	160 L/W	160 L/W	160 L/W	160 L/W
Luminous Flux (Lumen)	1600 lm	3200 lm	4800 lm	6400 lm	9600 lm
Color (K)	4000 K	4000 K	4000 K	4000 K	4000 K
Beam Angel	120°80	120°80	120°80	120°80	120°80
Battery	LiFePO4	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Capacity	275 WH	275 WH	384 WH	550 WH	660 WH
Solar Panel	Monocrystalline	Monocrystalline	Monocrystalline	Monocrystalline	Monocrystalline
Power	60 Watt	80 Watt	100 Watt	120 Watt	160 Watt
Controller	MPPT	MPPT	MPPT	MPPT	MPPT
Protection Class	IP 66	IP 66	IP 66	IP 66	IP 66
Pole hight	2,5 – 3,5m	3,5 – 4,5m	4,5 – 5,5m	6,0 – 7,0m	7,0 – 8,0m
Dimesion Lamp	600x250x125mm	600x250x125mm	600x250x125mm	600x250x125mm	600x250x125mm
Total Weight	15,8 Kg	18,5 Kg	19,7 Kg	21,4 Kg	22,7 Kg



360° Adjustable

Position of solar panel 360°adjustable.



60° Adjustable

Angle of solar panel 60°adjustable.

## LED - SOLAR STREET LIGHT

# DEFINEWA Compact



1000 - 10000 LUMEN

OUTDOOR ILLUMINATION BY SOLAR POWER

## NEW WAYS IN ILLUMINATION

The Definewa solar lamp is a self-sufficient and off-grid lamp for the illumination of roads, footpaths, cycle paths, parking spaces, parking and green areas, bus stops, company premises, super markets and much more.

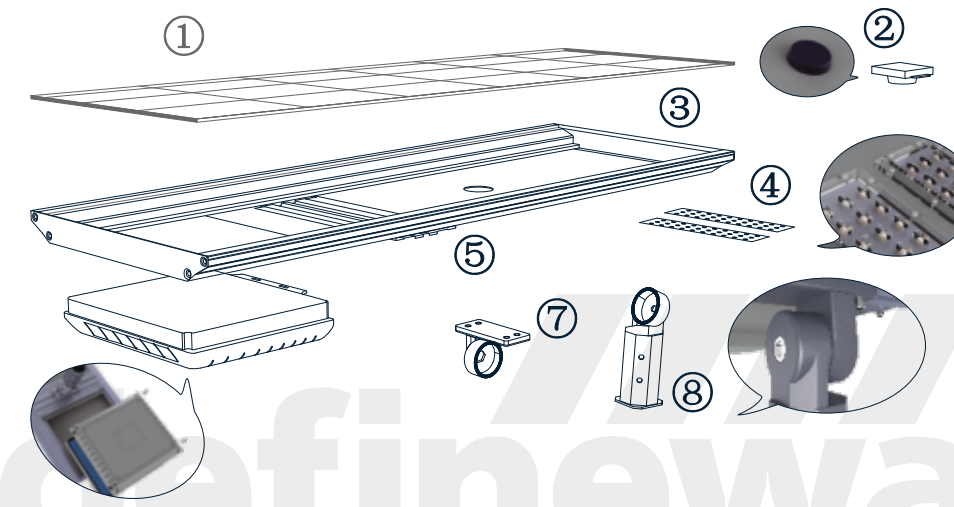
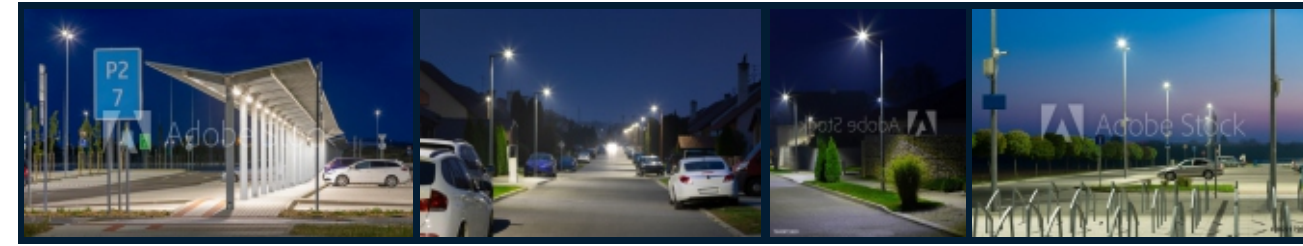
The control electronics and the battery are installed in the housing of the lamp under very high protection (IP 66). This guarantees trouble-free and maintenance-free operation.

A high-performance solar module generates the required power to operate the lamp.

When the Dusk begins, via a microwave sensor the lamp switches on auto-matically. The LED takes the required amount of energy from the battery to operate the lamp according to the specified programming.

The lamp is switched off in the same way after dawn.

All functions of the LED lamp monitored and programmed via the infrared sensor "eye". This individual adaptation of the operation of the lamp to the needs and necessities of lighting, ensures a very high availability of the lamp, even in low light months with less sun.



- 1. Solar Panel
- 2. Motion Sensor
- 3. Lamp body aluminium frame
- 4. High performance LED-Chip
- 5. Mounting plate for adjustable bracket
- 6. Battery box with battery
- 7. Upper joint of bracket
- 8. Bottom joint of bracket

### PRODUCT DETAILS

- 1. Patented design against high wind speeds up to 50 m/s
- 2. Intelligent lamp management with MPPT charging technology and microwave sensor / PIR sensor
- 3. LED-moduls with 160 Lumen / Watt
- 4. Brand lithium iron phosphate (LiFePO4) battery with intelligent software easy to replace and to install

## FEATURES

**Solar Module:** Monocrystalline high-performance module with cell-efficiency of more than 20%

**LED Module:** Powerful Bridgelux LED, luminous intensity up to 10000 Lumen

**Battery:** Durable LiFePO4 energy storage. Free of toxic and polluting pollutants.

**Control unit:** MPPT controller with intelligent programming of luminous intensity and time as well.

Control of the solar module and battery management.

**Charging time:** approx. 6 hours with sunshine. Depending on the inclination and orientation of the lamp

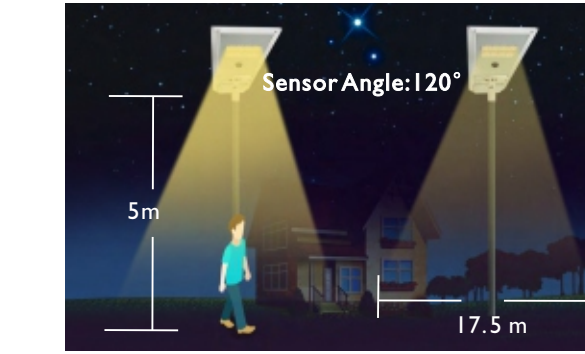
**Light duration:** Light duration without intermediate charge up to 24 hours (max mode) or up to 60 hours (dimming mode)

**Certificates:** CE | RoHS | IP66 |

## TECHNICAL DATA „DEFINEWA COMPACT“

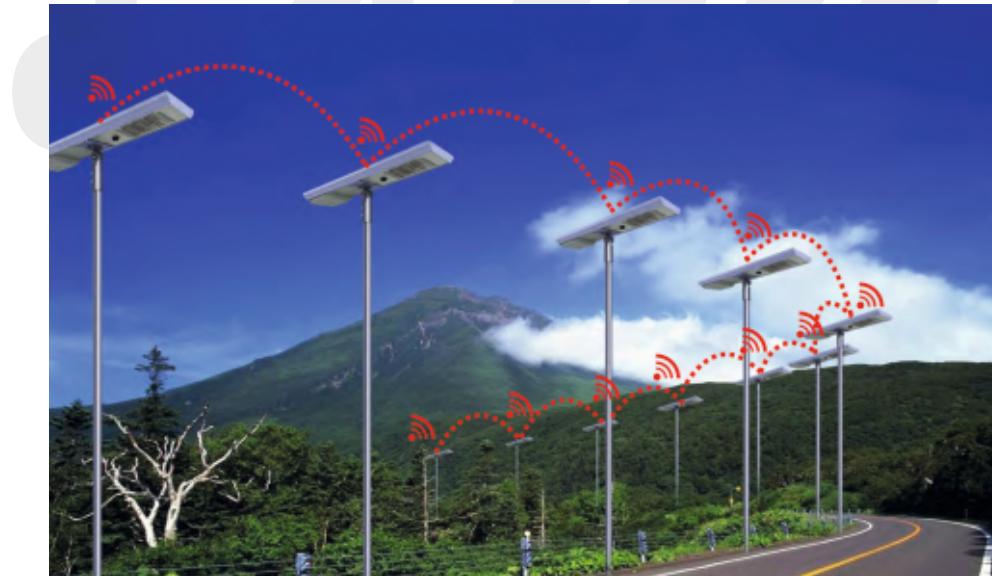
Type	DSC 5.30	DSC 10.60	DSC 20.80	DSC 30.100	DSC 40.120
LED Chip	Bridgelux	Bridgelux	Bridgelux	Bridgelux	Bridgelux
LED Efficiency	160 L/W	160 L/W	160 L/W	160 L/W	160 L/W
Luminous Flux	800-1000 lm	1200-1600 lm	2000-3200 lm	3600-4800 lm	5000-6400 lm
Color (K)	4000 K	4000 K	4000 K	4000 K	4000 K
Beam Angel	120*80	120*80	120*80	120*80	120*80
Battery	LiFePO4	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Capacity	192 WH	275 WH	384 WH	550 WH	660 WH
Solar Panel	Monocrystalline	Monocrystalline	Monocrystalline	Monocrystalline	Monocrystalline
Power	30 Watt	60 Watt	80 Watt	100 Watt	120 Watt
Controller	MPPT	MPPT	MPPT	MPPT	MPPT
Protection Class	IP 66	IP 66	IP 66	IP 66	IP 66
Pole height	2,0 - 2,5m	2,5 - 3,0m	3,5 - 4,5m	5,0 - 6,0m	6,0 - 7,0m
Dimesions	700x300x50mm	905x435x50mm	1196x435x50mm	1550x435x50	1550x435x50
Weight	11 Kg	12,5 Kg	14,7 Kg	17,4 Kg	18,7 Kg

## STANDARDS AND OPTIONS



The factory setting of the compact and modular series is with motion sensor mode. The lamp auto turned on when it is dusk, and turned off when it is dawn.

At night, when no one pass by, LED Module will dim to power saving mode and once anyone or moving objects approaches, LED Module will bright.



Optional wireless connection of DEFINWEA Compact or DEFINWEA Modular via a specially developed software for programming, monitoring and controlling the solar lamps via PC or smartphone



Charging efficiency: > 22%



Replacement of 734 Street Lights with Mercury Gas lamps  
250 Watt/ 13000 Lumen against LED Solar Hybrid Street Lights  
80 Watt/ 13600 Lumen Energy saving: 170 kWh

