



## Belisama

### Solar LED Street Light Systems

The Belisama product line has been created to be a part of an energy-efficient lighting system with minimal mains power consumption enabled by the lithium based storage of solar energy.

The system is capable of optimizing its own functions in a way that it only consumes mains power only if the battery charge reached critically low levels.

#### Features:

- outdoor LED lights up to 90 W
- cost-effective off-grid or grid-tie system
- save approx. 80% of environment lighting costs
- smart energy management with schedule and DIM functions

#### Options:

- LED Light Power: 10W/20W/30W/60W/90W
- Photovoltaic Power: 75W/150W/250W
- Battery backup: 1/2/3 days



#### Technical parameters:

Belisama Solar LED Street Light with 60AH Battery											
Parts:		Mechanical characteristics:				Nominal characteristics:					
Name:	Type:	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)	Number of cells	Nominal Voltage <sup>(1)</sup> (V)	Capacity <sup>(1)(2)</sup> (C/3) (Ah)	Energy <sup>(1)(2)</sup> (C/3) (Wh)		
LiFePo4 Cells	WB-LYP60AHA LiFeYPO4	244	203	114	9,2	4	12	60	720		
LED Controller	TCL-60					Input voltage	Output voltage	Output Current	Lighting without solar charge		
Led Lamp	EFFJAR2-030					20-40V	12V	1,05A	48 hour		
Solar Cell	260P+					Power	Lamp Lifetime	CRI			
						23W	30.000 h	>70			

Belisama Solar LED Street Light with 90AH battery											
Battery Pack:		Mechanical characteristics:				Nominal characteristics:					
Name:	Type:	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)	Number of cells	Nominal Voltage <sup>(1)</sup> (V)	Capacity <sup>(1)(2)</sup> (C/3) (Ah)	Energy <sup>(1)(2)</sup> (C/3) (Wh)		
LiFePo4 Cells	WB-LYP90AHA LiFeYPO4	244	218	143	12	4	12	90	1080		
LED Controller	TCL-90					Input voltage	Output voltage	Output Current	Lighting without solar charge		
Led Lamp	EFFJAR2-030					20-40V	12V	1,05A	72 hour		
Solar Cell						Power	Lamp Lifetime	CRI			
						23W	30.000 h	>70			

(1) Discharge with 80% DOD: Ustart= 52,8V Uend= 48V

(2) Ufloat= 57,6 V Ucutoff= 46,4 V, + 20°C / + 68°F

