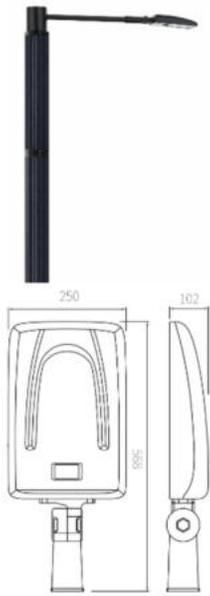


VITO



**Features:**

VITO is a solar street light is designed for effortless installation, with a dust-resistant structure that requires no maintenance or cleaning. Developed to redefine retrofitting, it transforms existing energy-consuming and inefficient light points into sustainable solar-powered solutions at a realistic cost, while maintaining a sleek and modern design.

The luminaire is crafted from extruded low-copper aluminum with IP66 protection, ensuring durability in harsh outdoor environments.

Equipped with LumiLEDs chips, it delivers a remarkable 160 lumens per watt for maximum energy efficiency. The LED board is combined with high-quality polycarbonate lenses, available in optical distributions T-I, T-II, T-III, T-IV and T-V, to provide optimal light performance across diverse applications.

An integrated microwave motion sensor detects pedestrians, cyclists, and vehicles, automatically increasing light levels when movement is sensed. This intelligent functionality enhances safety while conserving energy and minimizing environmental impact.

Applications include streets, highways, residential areas, campuses, commercial complexes, parks, and other urban or rural outdoor spaces.

**Technical Specifications:**

Input Voltage : 220- 240 V AC, 50 Hz.  
 Wattage : 30-60W  
 High Lumen : 160lm/W  
 3 STEP Mac Adam  
 High efficiency, low flicker driver  
 LED Type : LumiLED SMD 3030  
 Operating Temperature: -40°C to 75°C  
 Glow Wire Test 850° C  
 Warranty : 5 Years  
 Life Time: 100,000hrs at ta 25°C  
 (L90/B10)

**Battery Specification :**

Battery Capacity : 307WH 12.8V  
 Battery Type : LifePO4 32700  
 Battery Lifetime : D.O.D 50% 4000 Cycles  
 Charge Time : 4 hours  
 Discharge Time : >24 Hours  
 Vertical Solar Module : 140W 18V

**Installation Method**

Pole Mounted

Wattage(W)	:	30	60	2*30	2*60
Finish	:	Dark Grey (DG)			
Kelvin*	:	3000K	4000K	5000K	6000K
Optics	:	Type I	Type II	Type III	TYPE IV TYPE V
CRI	:	80+			
Driver	:	ON/OFF	0/1-10V	DALI	
Type	:	A (One lamp)	B (Two Lamp)		

\*Special Color & Finish on request

Pluxb luminaires are developed with globally recognized and tested components suppliers, however as per international standards tolerance in initial flux and connected load is at ±5%. Unless stated otherwise, the values apply to an ambient temperature of 25°C

## Product Code (55325060):

Wattage	Lumens(lm)	Dimension (LxWxH)mm
30 (1*30W)	4800LM	250x102x568
60 (1*60W)	9600LM	250x102x568
30 (2*30W)	9600LM	250x102x568
60 (2*60W)	19,200LM	250x102x568

\*Luminous flux value is calculated for 4000K CRI>80

## Photometric :

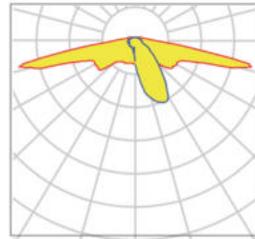
### Standards

EN 60598-1

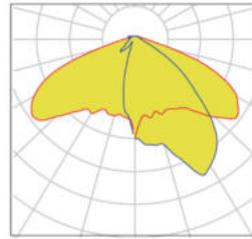
EN 60598-2-2

EN 60598-2-22

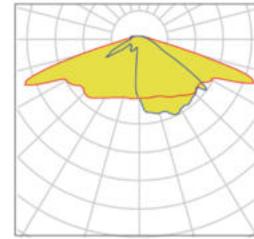
EN 60598-3-2



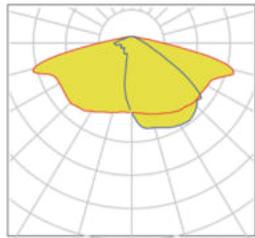
T2-L  
IESNA Type II  
(long)



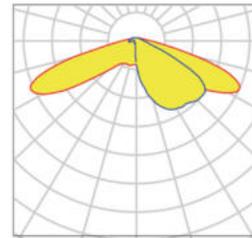
T2-S  
IESNA Type II  
(short)



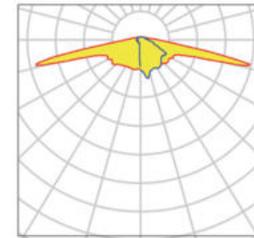
T3  
IESNA Type III  
(medium)



T3B  
IESNA Type III  
(medium min backlight)

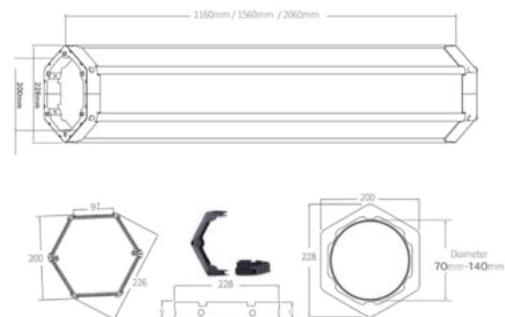


T3-M  
IESNA Type III  
(medium)



T3-L  
IESNA Type III  
(long)

## Solar Technical :



Order Code Ex: 55325060 30K 8 1 D A

CCT	CRI	Driver	Finish	Type	
30K - 3000K	8->80	1 - ON/OFF	D-Dark Grey	A (One lamp)	
40K - 4000K		2 - 0/1-10V		B (Two Lamp)	
50K - 5000K		3 - DALI			
60K - 6000K					

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# MPPT Charge Controller



Model number	MES60 ( for T3 & T5 )	DM80 ( for T6 & T8 )	DM120 ( for T10 )	DM160 ( for T12 )
System voltage	12V	12V	24V	24V
Output current range	50~3000mA	50~5600mA	50mA~4200mA	50mA~5600mA
Max. power of regular solar panel	130W/18V	200W/18V	260W/36W	400W/36W
Max. power of vertical solar module	400W/18V	500W/18V	600W/18V	800W/18V
MPPT tracking efficiency	98%			
Load output voltage	<60V	<35V	<60V	<60V
Max load power	60W	80W	120W	160W
Overcharge voltage	14.6V	14.6V	29.2V	29.2V
Overcharge recovery voltage	13.5V	13.5V	27V	27V
Over-discharge voltage	11.0V	11.0V	22.0V	22.0V
Over-discharge recovery voltage	12.4V	12.4V	24.8V	24.8V
Light control voltage	7V			
Operating temperature	-35 °C ~ 65 °C			
Net weight	380g	400g	400g	510g
Dimension(mm)	80*82*22.6mm	114*88.3*24.5mm	114*88.3*24.5mm	155*114.4*34mm
IP rate	IP68			
Warranty	3 Years			

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# Quality LifePO4 Lithium Battery Pack

## Main Features

- Lithium Iron Phosphate (LiFePO4) Battery
- Safest lithium chemistry with high energy density
- Built-in automatic protections
- Efficient & long-lasting up to 4000+ cycles DOD 50%
- >2000 cycles @0.2C, Charge/Discharge at 100% DOD Internal cell balancing
- Wide temperature range: -20 C ~ 70 C
- Maintenance free after installation
- Cost effective



Battery Spec	12V-24AH	12V-36AH	12V-42AH	24V-36AH	24V-42AH	12V-24AH
Battery cell type	LifePO4 6000mA 3.2V 32700					
Nominal Capacity	12.8V 24AH (307WH)	12.8V 36AH (460WH)	12.8V 42AH (768WH)	25.6V 30AH (768WH)	25.6V 36AH (921WH)	25.6V 42AH (1075WH)
Quantity per pack	16 pieces	24 pieces	28 pieces	40 pieces	48 pieces	56 pieces
Array Mode	4P4S	6P4S	7P4S	5P8S	6P8S	7P8S
Dimension ( L*W*H)	140*240*75mm	210*240*75mm	210*240*75mm	210*240*75mm	210*240*75mm	210*240*75mm
Charge mode	C.C + C.V					
Charge Cut-off voltage	14.6±0.05V	14.6±0.05V	29.2±0.05V	29.2±0.05V	29.2±0.05V	29.2±0.05V
Discharge Cut-off Voltage	11±0.05V	11±0.05V	22±0.05V	22±0.05V	22±0.05V	22±0.05V
Storage Temperature	5 C ~ 35 C					
Operating Temperature	-20 C ~ 65 C					
Lifetime ( D.O.D. 50%)	4,000 cycles D.O.D 50%					
Warranty	3 Years					

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# Zigbee System

# Comparison of Zigbee and 2G



Gateway ( 4G Sim Card inside)



Zigbee Module + Solar Controller

The zigbee control system is an integrated smart control system, the light control module is composed of two parts as solar controller and the signal module, These two parts are connected via the RS485 interface as the light control part. it communicates with the gateway with the Zigbee signal.

## Zigbee:

The bottom layer uses free wireless frequency communication, and the bottom layer data is transmitted to the Internet through a centralized gateway, so that one gateway can manage multiple street lights.

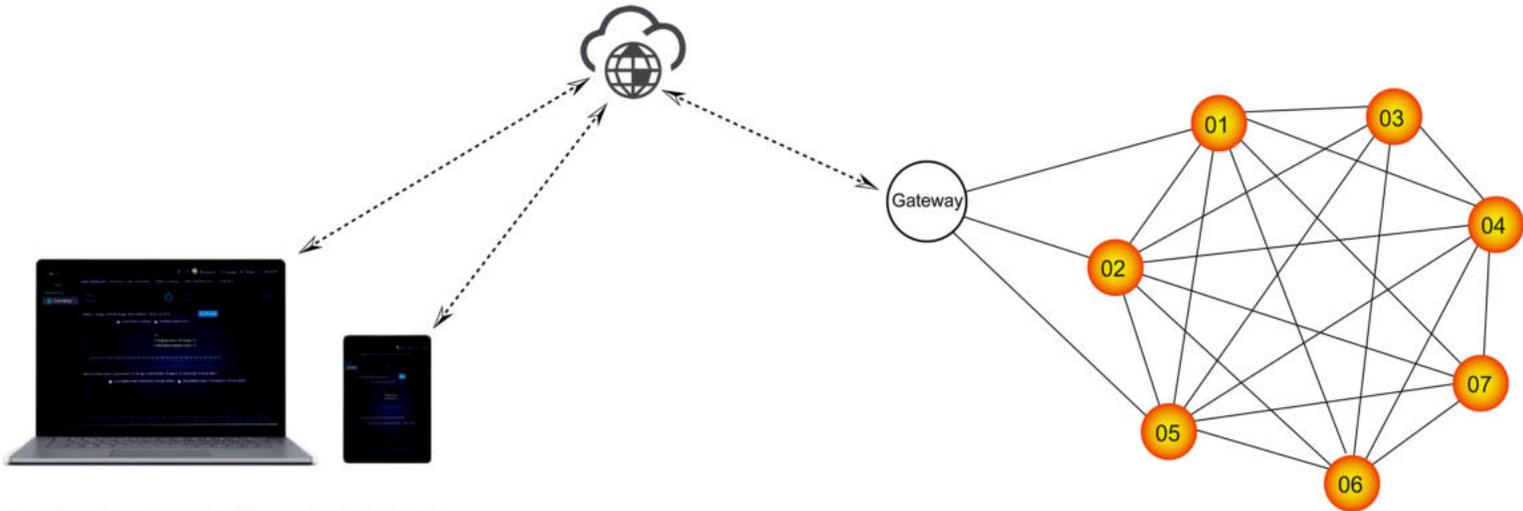
Advantages: when mass street lamps are used, the communication fee is relatively low.

## 2G/4G/GPRS/NB-IOT

The direct connection scheme is adopted, and there is no centralized manager, and the signal transmission is carried out through the base station of the mobile operator.

Advantages: The signal reliability and safety are relatively high, the construction is relatively simple, and there is no need to install a concentrator.

Disadvantages: The communication module and communication fees are relatively high.



More information, please refer to the Zigbee system datasheet of

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