

# TITAN

ALL IN ONE SOLAR  
STREET LIGHT



ISO9001



ISO45001



ISO14001



BSCI

Business Social Compliance Initiative



# TITAN<sub>AIO</sub> SOLAR STREET LIGHTS

TITAN is the latest design series of all In one solar street Light adopts the classical concept of 'All In One' and module structure, which offers extremely effective illumination for a wide range of applications. It's based upon 'reliability' and 'easier to installation' as all components are integrated into one housing. TITAN is adopting quality aluminum die casting housing instead of aluminum alloy which has better performance in wind-resistant and reaches to high IK level with aesthetic appearance. suitable to be installed in parks, pathways etc.

TITAN solar-led street lights adopt quality components with the most reliable and high performance. Using more quantity of SMD3030 in order to offer an ultra-high luminous output which is up to 150lm/watt. And using MPPT solar charge controller instead of PWM, guarantee enough power can generate daily with high efficiency by 30% more than using PWM. More suitable for the areas where are full of hot sunshine all the year-round. TITIAN is adopting a big battery to store the power and there will be more days of backup. ensuring there is lighting service even in very challenging conditions.

TITAN series is also intelligent by combining a programmable MPPT controller, recyclable lithium battery system, asymmetric illumination LED source, and sensitive 'Smart Eye' motion sensor, to realize the efficient cost, easier maintenance, saving energy.



## Advantages

- Three years warranty.
- Easy Installation
- Fully integrated solar technology
- Top pole and wall option
- Light and resistant



## Performance

- IP65, IK08
- Shelf life 25 years
- Presence sensor
- Lithium battery
- Aesthetic appearance

# Main Feature

## PIR Motion Sensor

PIR Motion Sensor with upto 10m wide range human body infrared rays detector - it gathers automatic convenient, safe energy saving, functions.

## MPPT Controller

Smart solar charge controller with LED driver inbuilt with multi-period control, charging and discharge efficiency more than 97%. IP67 waterproof and high-temp resistant.

## Monocrystalline PV

- » Integrated high efficiency MONO Crystalline module
- » 7 % higher power output compared to industry average poly-crystalline module
- » Higher performance at longer wavelengths of light (1100-1200 nm)
- » Superior temperature co-efficient and performance at NOCT, PTC ratings
- » Excellent performance at low light irradiation

## Built to Last

TITIAN are designed to withstand the harshest and most extreme environments has to offer, whatever the environment is, truelite rugged construction is up for the challenge. Its internal components offer IP65 weather protection and its external components are built with marine grade aluminum and stainless-steel fixture.

## LED Optics

120° \*70° degrees beam angles light utilization more than 70% for street applications light transmittance 92%, antti-UV, IP65 dust-proof & waterproof

## Lithium Battery Pack

Battery bank will be providing as per customer requirements and project conditions. Lithium ion battery long life up to 1800 circles (5 to 8 years) withstand high temperature.

## Unique Properties

- All In one solar street light can easy to install
- » Switch & play without cabling -fast installation
- » Lithium ion battery technology offers up to 4 times more discharge capacity over lead acid type and 3 times more cycle life.
- » Automated LED output for greater battery autonomy
- » Customer can replace component (Battery)

## Lighting the Way

Built specifically to illuminate a wide range of applications. It is the worlds most versatile and compact LED solar lighting system, its clever design and slim line construction incorporates the latest solar power and led technology providing many years of consistency performance and operational reliability

# Main Specification

Item number	Titan T400	Titan T600	Titan T800
Peak Luminous Flux	4,800lm	6,800lm	8,800lm
Rated Power	30W	45W	60W
CRI	>79		
LED Type	Lumileds SMD3030 120pcs	Lumileds SMD3030 180pcs	Lumileds SMD3030 240pcs
CCT Range	3000K / 4000K / 5000K / 6000K		
Beam Angle	Bat wing pattern with polarized light		
Battery Capacity	230WH 12.8V	460WH 12.8V	691WH 12.8V
Battery Type	Brand new LifePO4 32700 6000mA 3.2V		
Battery Lifetime	D.O.D 50% 4000 cycles		
Charge & Discharge Time	4 hours & >24 hours		
Solar Panel	56W 18V		
Working Temp.	20 °C ~ 75 °C	80W 36V	120W 36V
Control Method	Automatic dusk to dawn / Time Control / Manual ON-OFF		
Solar Charge Controller	MPPT with motion sensor by SRNE		
Default Lighting modes	6 hours 100% + 6 hours 50%, 12 hours operation		
Motion Sensor	Microwave / PIR optional		
Fixture Size	790*368*145mm	1010*430*145mm	1200*505*160mm
Fixture materials	Aluminium Die Casting		
Fixture color	Gray RAL7005		
Mounting Diameter	60mm / 80mm		
N.W/Light	9.60kg	14.30kg	15.40kg
G.W/Light	10.30kg	15.30kg	16.40kg
IP Rate	IP65		
Warranty	3 years		
Certificates	CB CE ROHS IP67 LM79 LM80 FCC		

# MPPT Charge Controller



Model number	MES60
System voltage	12V
Output current range	70~3000mA
Max. power of regular solar panel	130W/18V
Max. power of vertical solar module	300W/36V
MPPT tracking efficiency	98%
Load output voltage	<60V
Max load power	60W
Overcharge voltage	12.8V
Overcharge recovery voltage	12.0V
Over-discharge voltage	11.0V
Over-discharge recovery voltage	11.5V
Light control voltage	7V
Net weight	280g
Dimension(mm)	580*82*22.60mm
IP rate	IP68
Warranty	3 Years

# Quality LifePO4 Lithium Battery



## Main Features

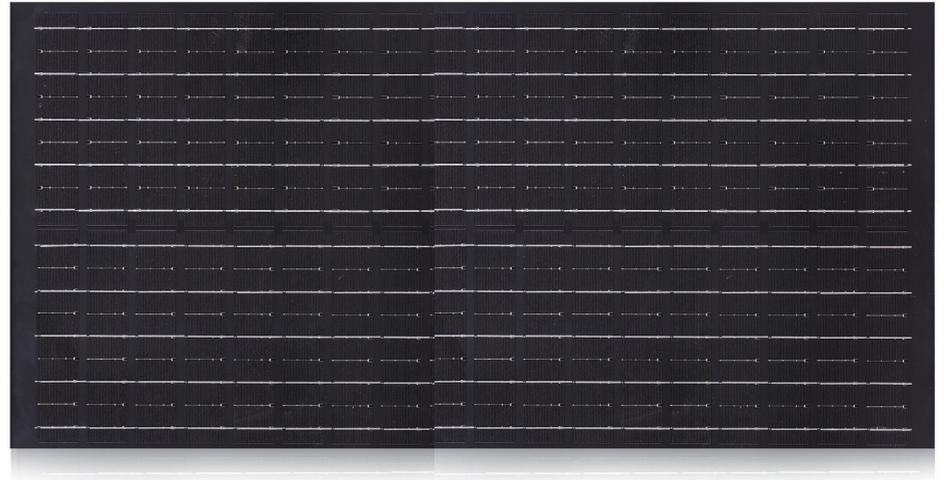
- Lithium Iron Phosphate (LiFePO4) Battery
- Safest lithium chemistry with high energy density
  - Built-in automatic protections
- Efficient & long-lasting up to 4000+ cycles DOD 50%
  - Wide temperature range: -20 °C ~ 70 °C
  - Maintenance free after installation
  - Cost effective

Battery Spec	12.8V-18AH	12.8V-36AH	12.8V-54AH
Battery cell type	LifePO4 6000mA 3.2V 32700		
Nominal Capacity	12.8V 18AH (230WH)	12.8V 36AH (480WH)	12.8V 54AH (691WH)
Quantity per pack	12 pieces	24 pieces	36 pieces
Array Mode	3P4S	7P4S	5P8S
Dimension (L*W*H)	130*220*36mm	290*210*36mm	290*310*36mm
Charge mode	C.C + C.V		
Charge Cut-off voltage	14.6±0.05V		
Discharge Cut-off Voltage	11±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		

# Monocrystalline Solar Panel

## Certifications

- IEC61215, IEC61730 •
- ISO9001:2015 Quality Management Systems •
- ISO45001 : Enbvironmental Management Systems •
- ISO45001:2018 Occupational Health and Safety Management System •



STC :  Light intensity 1000W/ m<sup>2</sup>  Battery temperature : 25 C  Atmosphere quality = 15

NOCT :  Light intensity 800W/ m<sup>2</sup>  Battery temperature : 20 C  Atmosphere quality = 15  Wind velocity 1m/s

Model number	MSD-56W	MSD-80W	MSD-120W
Peak power / Pm(W)	18.0V	18.0V	18.0V
Max. power voltage / Vmp(V)	3.12A	4.45A	6.67A
Solar cells efficiency	>21.7%	22.3%	22.3%
Dimensions(L*W*T)	762×340*4mm	970×400*4mm	1160×475*4mm
Grade of solar cells	A grade		
Operating temperature range	-40 °C - +85 °C		
Power output warranty:	10 years > 90%, 25 years > 80%		
Warranty	5 years		
IP rate	IP65		
Product Certifications / Standards	CE, ROHS ISO9001:2008, RoHSCE, IEC61215		





## THE ONLY QUALITY Governments Trust

As the most classic model of solar led street light, HERMES is accredited by government customers in many countries.

In Oct 2021, The Chinese Consulate General donates auroras's solar lights to the Iraq government in Erbil. 270 complete sets of Hermes solar street lights 80W are installed on the main road of Erbil city to light up the nights.



## More Products



ATHENA



HELIOS



VENUS



TITAN



SOLARWRAP PV



APOLLO



SOLMATE



ARES