



FEGARI

ALL-IN-ONE

SOLAR LED STREET LIGHT

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Introduction

Fegari All-in-One Solar LED lights constitute the most innovative, cost effective and elegant solution to illuminate public and private spaces such as streets and intersections, markets and public squares, industrial and military compounds, border checkpoints etc.

Wherever there is no reliable pre-existing electrified street light infrastructure, all-in-one solar street lights are the best option for illumination.

Fegari Street Lights are currently the only German and European provider of all-in-one lighting solutions.

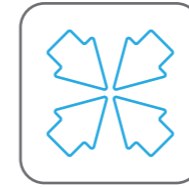
With our high end research and development laboratory in Dresden, Germany, the performance, quality and lifespan of the Fegari Street Light surpasses that of any competitor.

Our quality control in Germany assures the highest standards and assures highest quality and long warranty periods for our products.

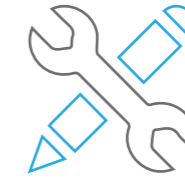
In addition Fegari street lights are always tailored to the specific needs of the client, offering a wide range of additional features (i.e. special industrial standards, different performance specifications, or features such as Video-surveillance, Wifi hotspots and mobile device charging).



Our Main Features



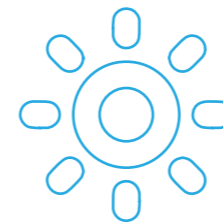
All-in-one design incl.: Solar Panel, LED Lamp, Battery, Controller Panel



Fully customisable with many options



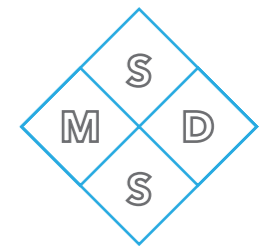
Very long warranty



Superior brightness LM80 LED inside, the luminous efficiency >210LM/W



High efficient Sunpower (24%) mono-crystalline solar panel



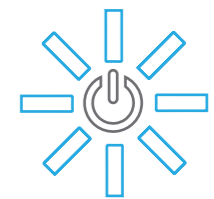
MSDS Passed High lifespan LiFePO4 battery



Easy maintenance on battery, controller and LED lamp



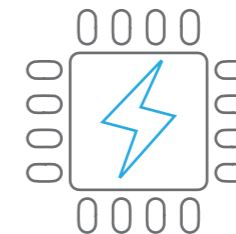
Cost-effective and fast production and transportation



Automatically turning on and off according to brightness



Motion Sensor, Time and Internet Control Intelligent Mode Available



High Charging Efficiency MPPT Controller



Certified for CE, ROHS, IP65 Standards

Fegari vs Other Brands

German company with R&D and manufacturing experience

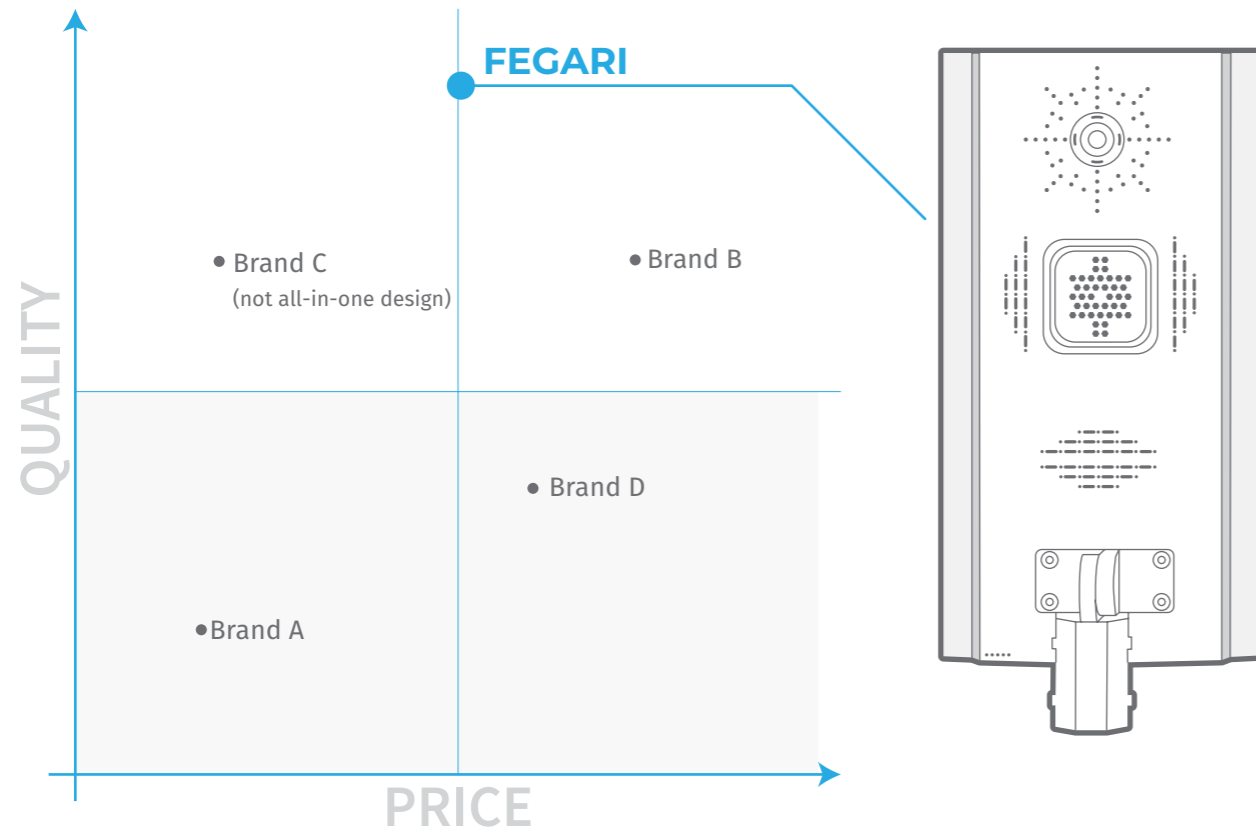
- + Customised for every project
- + State of the art R&D and strict quality control
- + Low maintenance cost design with high ROI
- + Pre-sale and after-sale service
- + Designed and Made in Germany



Standard LED lamps of competitors

- Often less lumen than indicated
- Possible flickering light
- Short circuits / melting of connectors due to power problems
- Battery reliability problems, especially in very warm, cold and humid climates
- No exchange of parts possible
- Shorter lifespan

Fegari excels in Quality and Price



Fegari lamps offer high quality solar powered LED light solutions with unparalleled warranties at competitive prices. Extensive research, the best components, and extremely stringent and thorough manufacturing processes in Dresden, Germany assure that the **Fegari All-in-one Solar LED Lights** are offering optimal solutions for our customers. Fegari Lamps excel in terms of guaranteed lifespan, quality of light delivered and options for customisation and adaptation.

Advantages of LED lamps

LED is far superior to classic HPS Lamps:

FEGARI LED ILLUMINATION

- Longer lifetime
- Better brightness
- Lower maintenance costs
- 100 percent light after start

HPS ILLUMINATION

- Low Lumen
- Less Efficient
- Huge costs
- High power consumption

Extreme long life LEDs

Our High quality LED are designed to last for over 100.000 hours in harsh weather conditions, thanks to its waterproof design and thorough quality control. LED can be replaced individually as part of the warranty or through our worldwide after-sale service.



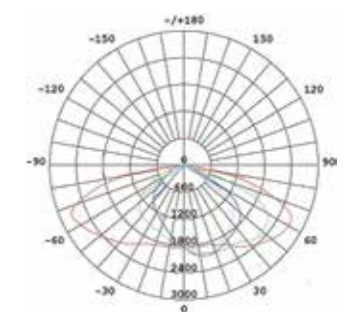
Ultra efficient LED lights for maximum brightness

High brightness and low light decay: Customised LM80 Nichia LED are used in Fegari Lamps which achieve an unmatched 210LM/W efficiency.

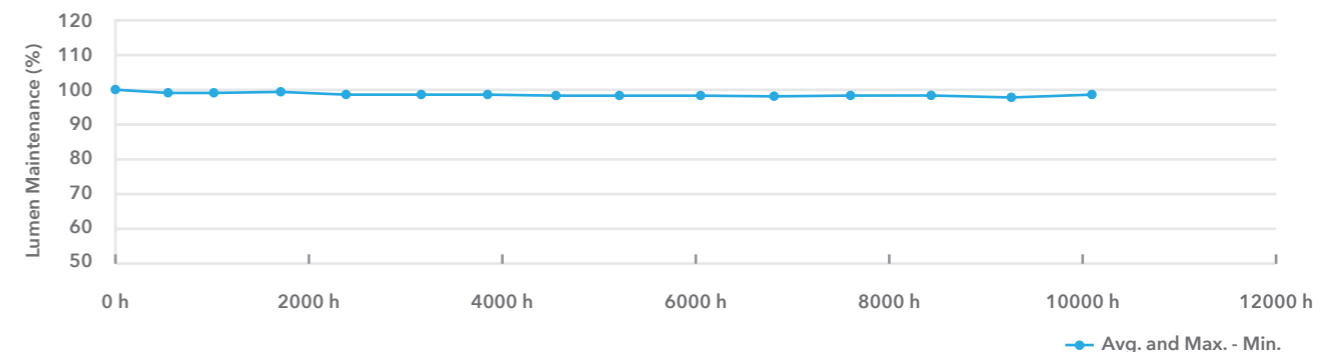


40% more illumination

Our patented special light distribution lenses vastly improve the illumination area. Compared with competitor products, illumination area is increased by **40%**, and illumination uniformity is improved by up to **170%**

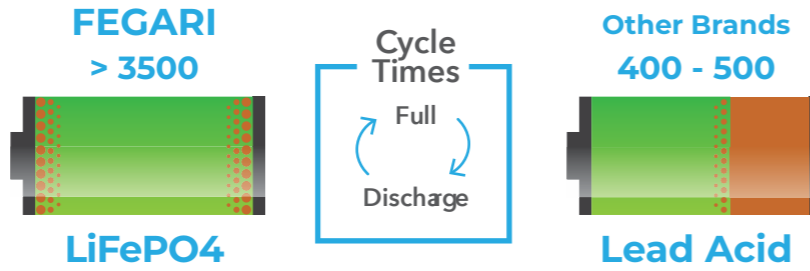


Exceptional performance and longevity of the LED panel



↑ Powerful Battery

Best-in-class Level A
LiFePO₄ batteries are used by Fegari. It features not only up to 7 times' longer lifespan than lead-acid but also has unique charging depth protection. It highly increases the lifespan of battery to over 8 years.



↑ Unique Battery Temperature Control

A unique battery temperature regulation system can be adapted in the Fegari lamps. When the temperature is below 0°C, the system starts to heat the battery to keep its temperature above 0°C guaranteeing its normal performance specifications and prolonging the lifetime of the batteries significantly. Options for cooling are available depending on specifications.



Many cycles charge



Fast charging

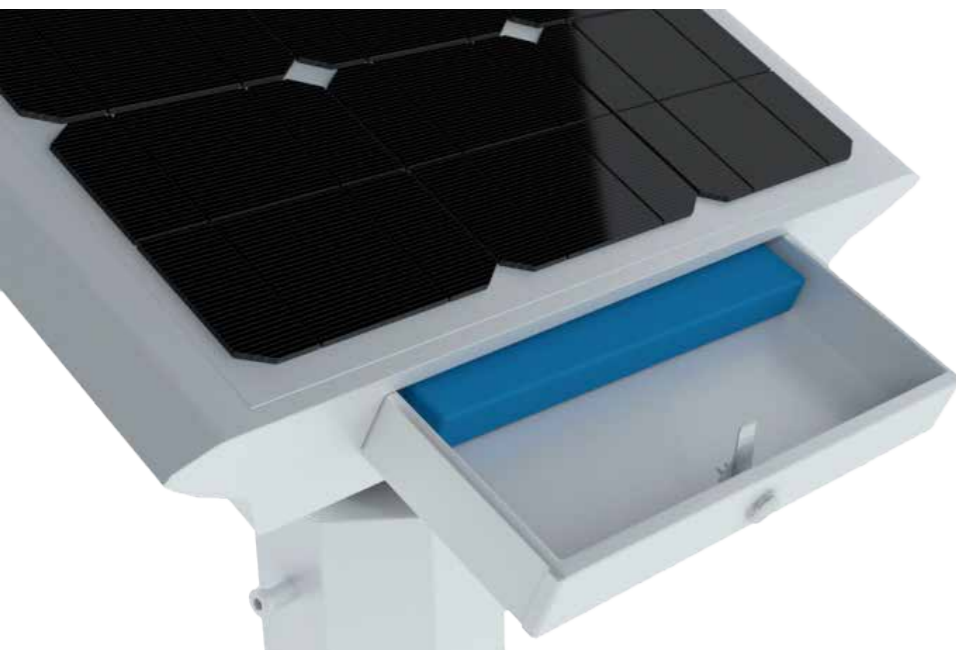


High performance



Longer light duration

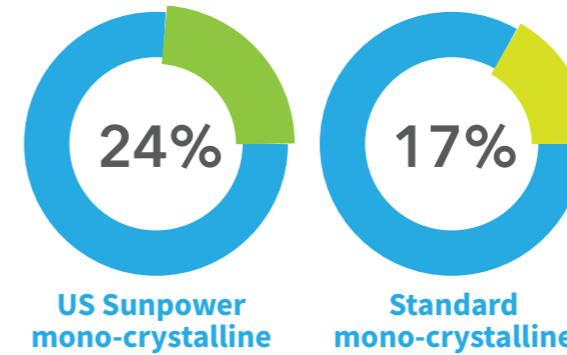
↑ Easy Replacement of Parts



Batteries and controllers are usually the main factor limiting the solar LED street lights' lifespan. While we use the best available components, the lamps are designed to last even longer and components such as the solar panel have a warranty of 25 years. Thus, to reduce maintenance costs and assure the lamp remains in operation beyond the lifespan of the battery and controller, we have installed an easy-access-drawer, that allows the after-sales service team or the client to open the drawer of the Fegari lamp with the special theft protection key. The battery or the controller unit can then easily be replaced by simply unplugging the old one and connecting a new one. Our after-sales service offers spare parts for each component of the lamp.

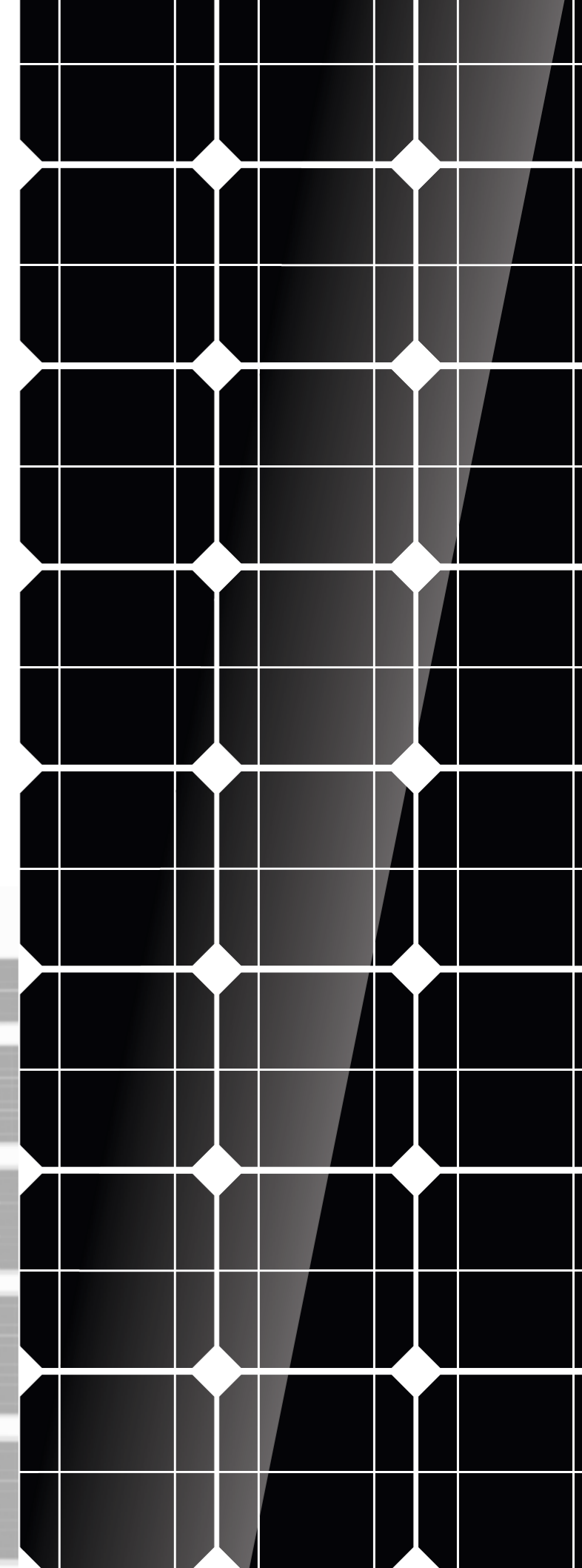
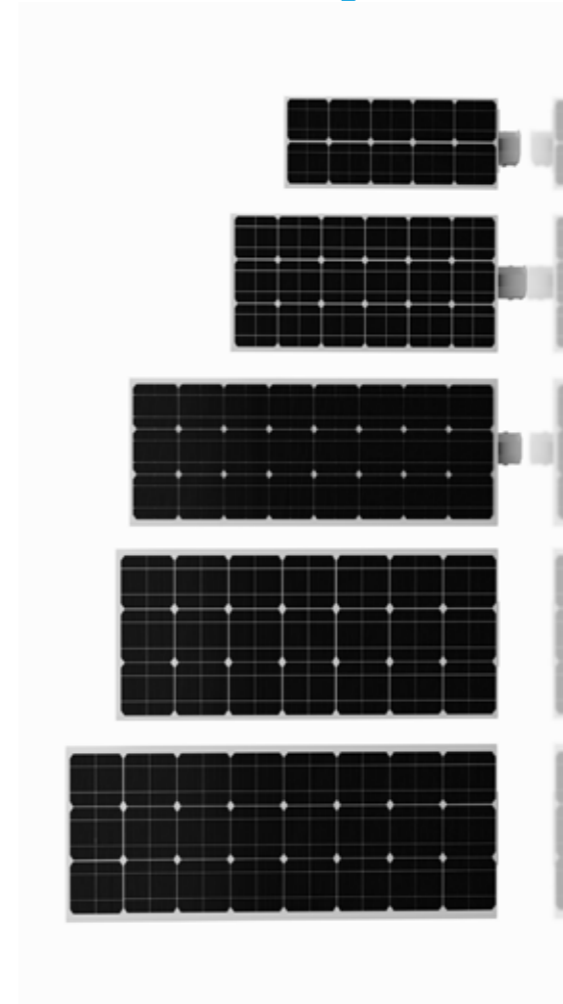
↑ Mono-crystalline Solar Panel

Fegari lamps use custom tailored US Sunpower mono crystalline solar panels as powering source. Its 24% charging efficiency is significantly higher than standard mono crystalline (17%) or polycrystalline panels.



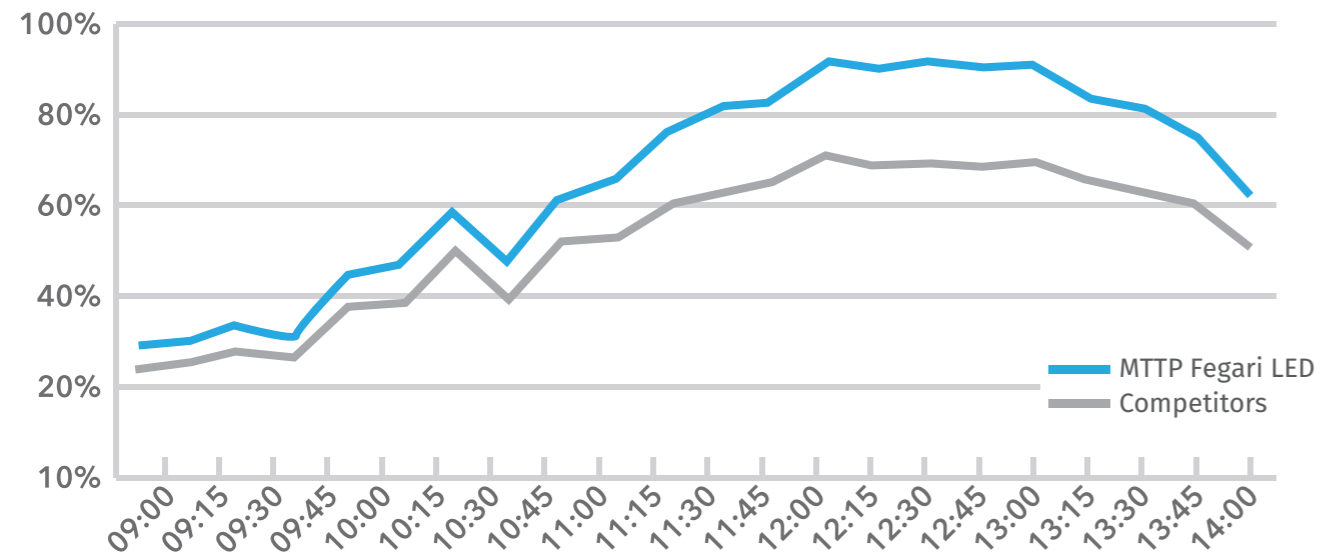
SUNPOWER®

25 years of lifespan



High Efficiency Controller

As the control unit of any solar LED street light, the controller plays a critical role. Therefore Fegari is equipped with the best MPPT (Maximum PowerPoint Tracking) Controller, offering 20%-30% higher charging efficiency than PWM controllers that are commonly used. It also has protection for over-current, over-voltage, over-heating for quality control.



Motion Sensor

Fegari lamps come complete with a built-in motion detection system that automatically regulates the light source from full bright (100%) to the energy saving output (15%) to increase battery autonomy if needed or preferred, i.e during prolonged periods of cloud cover or to reduce light pollution.

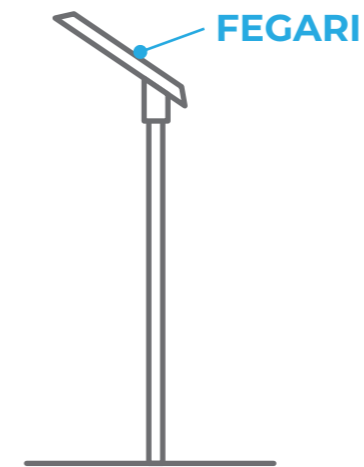


Optional Features

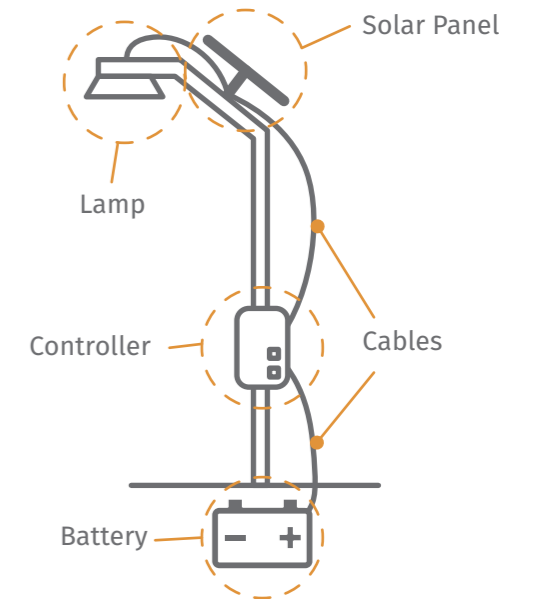
- + Ultra HD video surveillance or night vision surveillance
- + USB mobile charging plugs
- + Special conditions: oil and gas standards
- + Ultra bright light for surveillance
- + WIFI network
- + Anti-jamming protection for surveillance
- + Remote control
- + Programmable times



ALL-IN-ONE Solution vs Conventional Solar Powered LED Lamps



VS

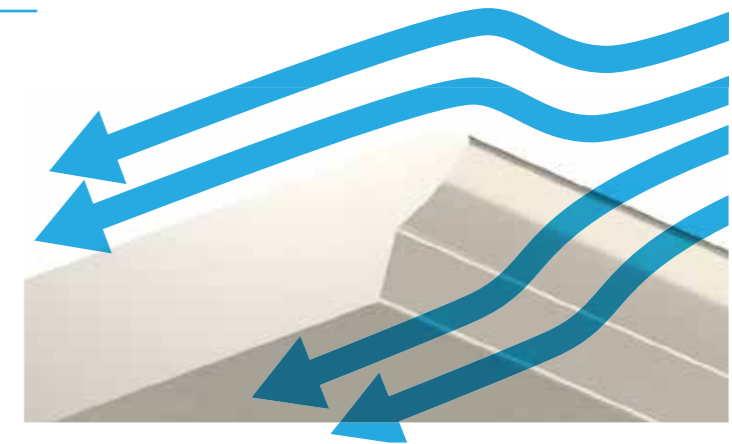


- + Easy and trouble free installation
- + Minimal maintenance
- + Theft proof
- + Lower maintenance costs
- + Extremely long life span

- Complex and expensive to install
- Requires engineer to install and maintain
- High probability of failure
- Expensive maintenance costs
- Batteries and controller prone to theft

Swing Frame Structure

The Fegari Swing Frame structure is designed to reduce wind stress and improves the durability of the product. It is tested and approved for storms of 176km/h wind force.

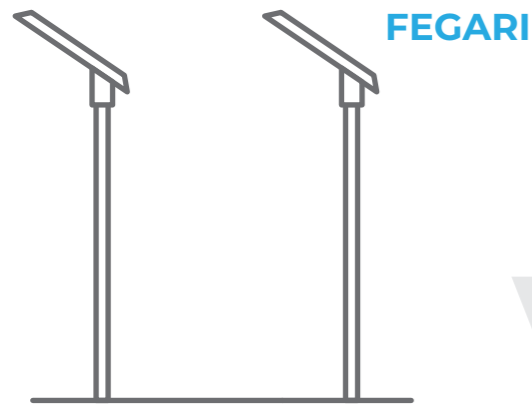


Angle Adjustable Bracket

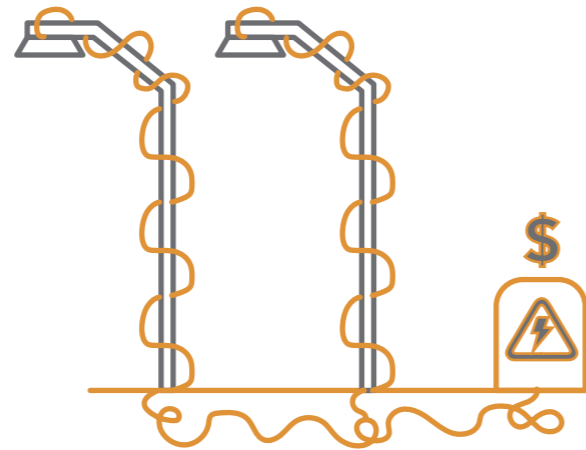
The bracket angle can be adjusted to meet the different axial requirements of the illumination area and can be adjusted to the different longitudinal requirements depending on the geographic location. A theft proof screw system can be installed.



Solar vs Cabled Street Lights



VS



- + Easy installation
- + Minimal technical problems
- + Elegant and modern design
- + Significant cost savings
- + Guaranteed availability

- Higher maintenance costs
- Extremely high installation costs
- Higher running costs
- Higher risk of failure

Quick & Easy Installation








Fegari products are known for their ease of installation. Under most circumstances, installing our solar LED street lights is a very simple process and takes less than five minutes to complete.

Use 4 screws to fix the support on the lamp and fix the lamp on the pole. The lamp has an on/off switch. Turn the lamp on and it works.

Standard solar LED street lights take usually 3-4 hours to assemble. Fegari Lamps cut costs and reduce the risk of failures due to inadequate installation.

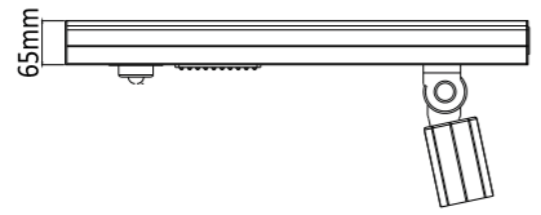
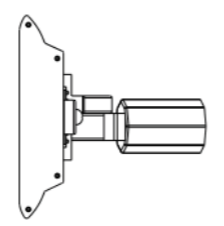
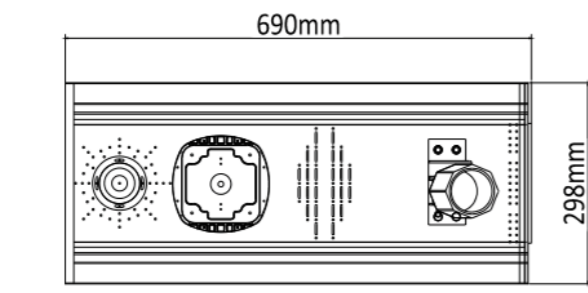


Technical Specifications

						
Model No.	LUV-DN2-15W	LUV-DN2-20W	LUV-DN2-30W	LUV-DN2-40W	LUV-DN2-50W	
LED Watt(W)	15	20	30	40	50	
LED Chip	LM80 Nichia 3030	LM80 Nichia 3030	LM80 Nichia 3030	LM80 Nichia 3030	LM80 Nichia 3030	
Solar Panel (W)	30	50	70	100	120	
Lithium Battery (WH)	192	256	320	448	512	
Beam Angle (°)	150*80	150*80	150*80	150*80	150*80	
Color Temperature (K)	6000-6500	6000-6500	6000-6500	6000-6500	6000-6500	
Typical Luminous Flux (LM)	2400-2550	3200-3400	4800-5100	6400-6800	8000-8500	
Lighting Mode	Pole (<8M)	PIR Sensor Time Control	PIR Sensor Time Control	PIR Sensor Time Control	PIR Sensor Time Control	PIR Sensor Time Control
	Pole (>8M)	Time Control	Time Control	Time Control	Time Control	Time Control
Charging Time (HOURS)	6	6	6	6	6	
Min. Working Time(HOURS)	Full Bright	12	12	12	12	12
	Dim Mode	48	44	40	40	40
Product Size (MM)	690*298*65	830*424*65	1080*424*65	1160*536*65	1316*536*65	
Net Weight (KG)	12	16	19	22	24	
Package Size (MM)	860*398*160	1002*524*160	1252*524*160	1295*636*160	1451*636*160	
Gross Weight (KG)	15	19	22	25	27	
Height Advice (M)	4-5	5-6	7-8	8-10	10-12	
Distance Advice (M)	12-15	15-20	20-25	25-30	30-35	
Working Temperature (°C)	-20-65	-20-65	-20-65	-20-65	-20-65	
20" Container (PCS)	551	358	282	212	195	
40" HQ Container (PCS)	1297	835	670	516	457	
Warranty	6 years	6 years	6 years	6 years	6 years	
Manufactured	Made in Germany	Made in Germany	Made in Germany	Made in Germany	Made in Germany	
LED lifetime	Over 60.000 hours	Over 60.000 hours	Over 60.000 hours	Over 60.000 hours	Over 60.000 hours	
Certificates	IP 65, CE and ROHS	IP 65, CE and ROHS	IP 65, CE and ROHS	IP 65, CE and ROHS	IP 65, CE and ROHS	
Lifespan of Solar Panel	25 Years Guaranteed	25 Years Guaranteed	25 Years Guaranteed	25 Years Guaranteed	25 Years Guaranteed	
Charging Cycles of Battery	Over 3.000 Charging Cycles	Over 3.000 Charging Cycles	Over 3.000 Charging Cycles	Over 3.000 Charging Cycles	Over 3.000 Charging Cycles	
Lampshade	Anti-ultraviolet and high bright acrylic fittings	Anti-ultraviolet and high bright acrylic fittings	Anti-ultraviolet and high bright acrylic fittings	Anti-ultraviolet and high bright acrylic fittings	Anti-ultraviolet and high bright acrylic fittings	

Note: Option for brighter lamps (up to 16.000 Lumen) in version of 60W, 80W, 100W, 120W available upon request.

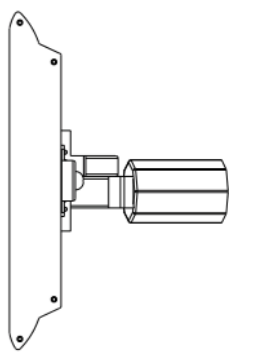
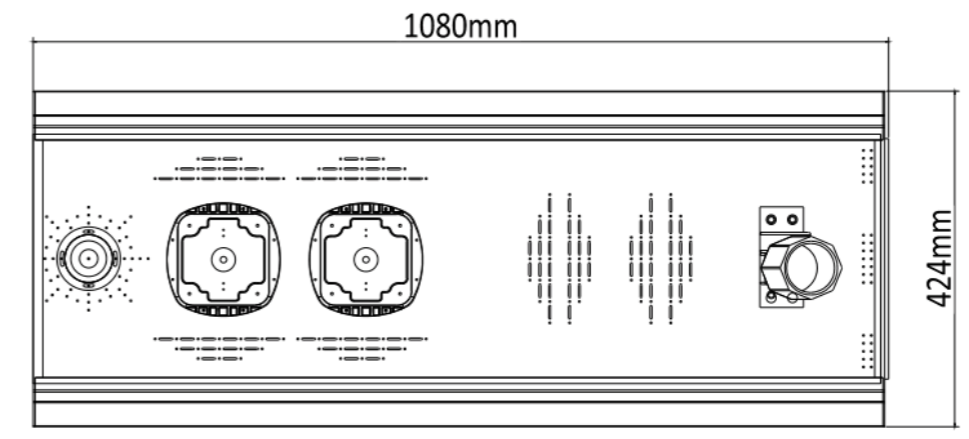
Product Size



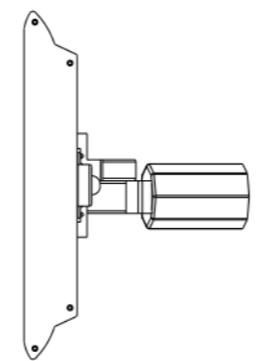
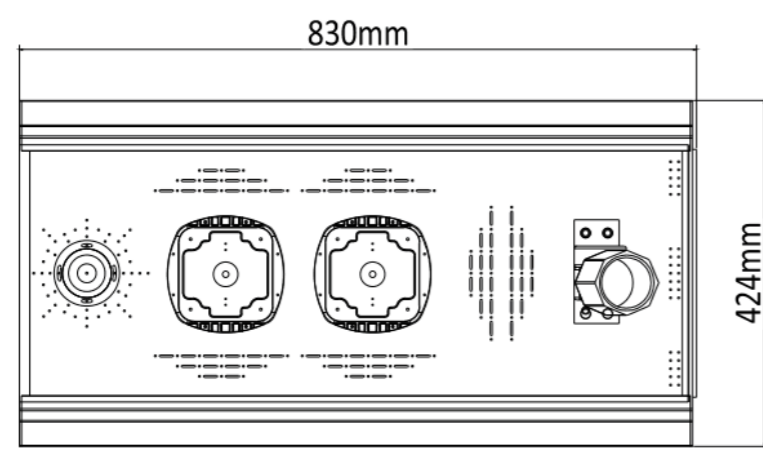
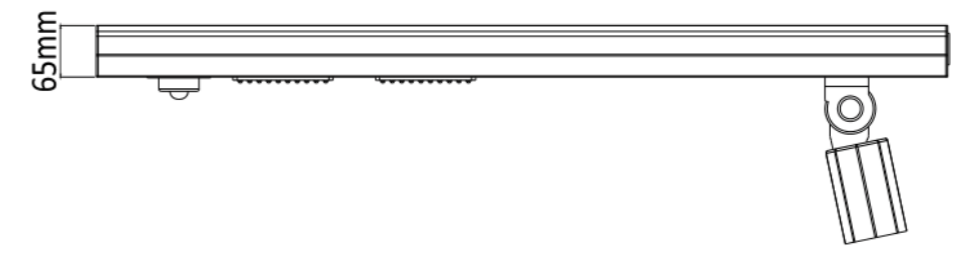
LUV DN2-15W



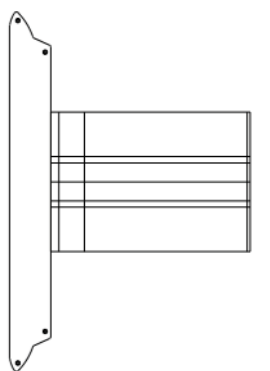
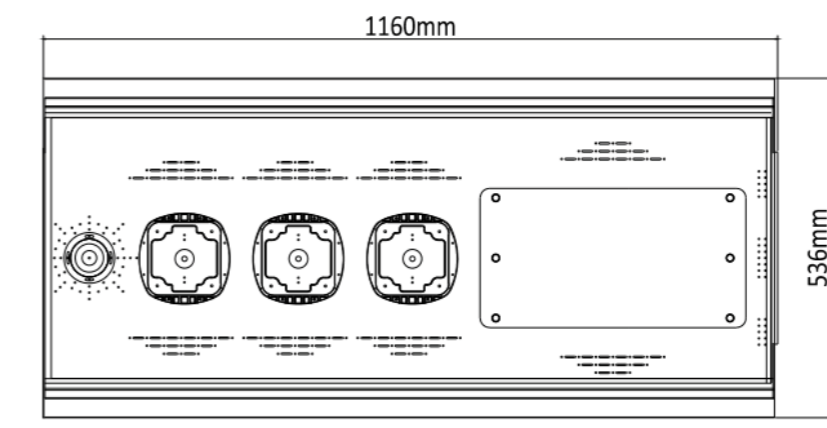
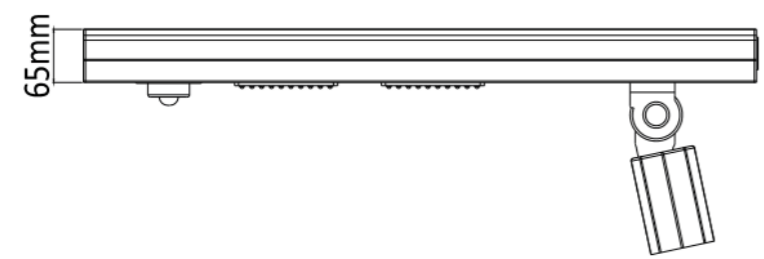
Product Size



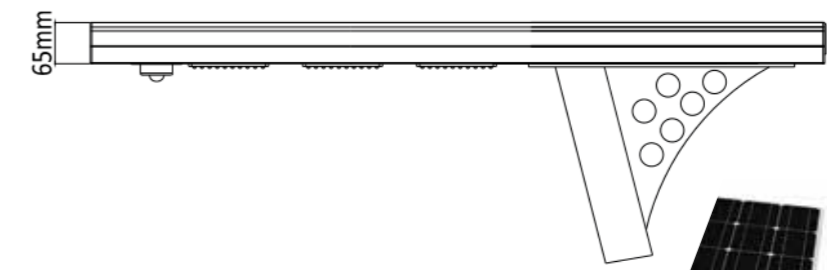
LUV DN2-30W



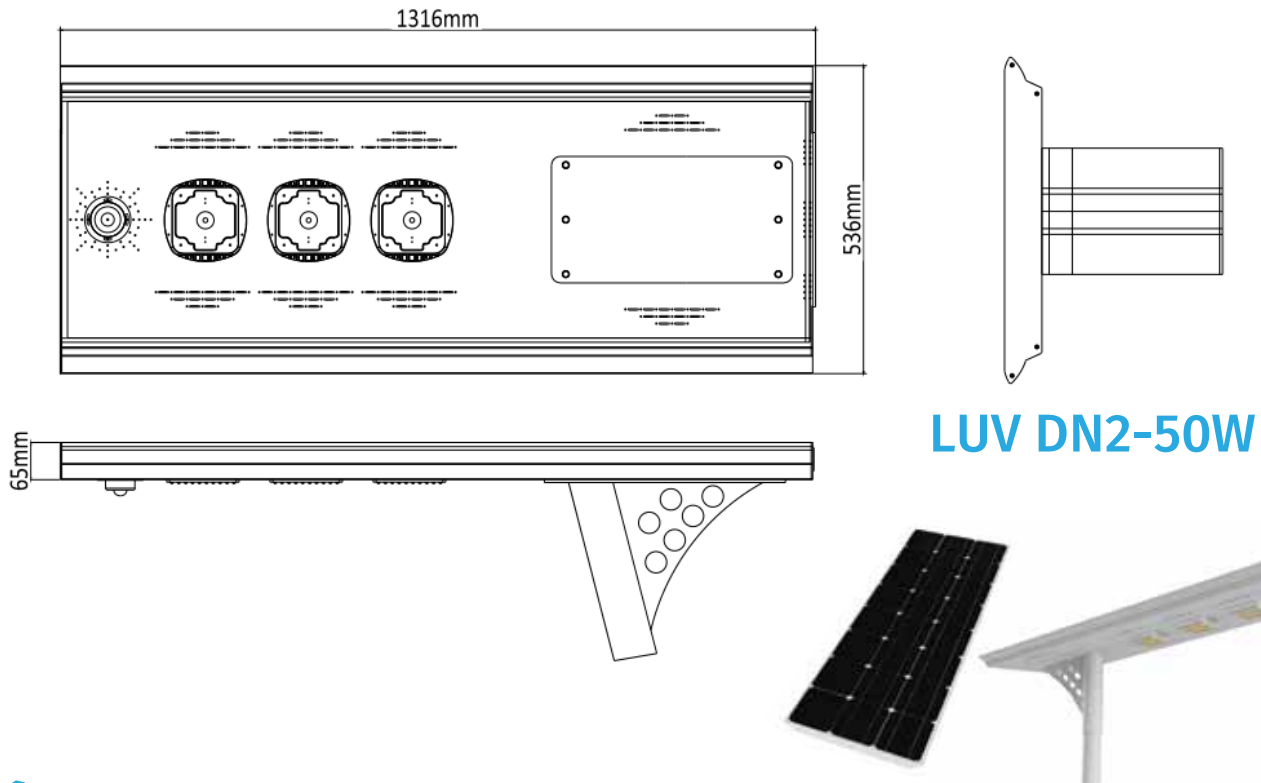
LUV DN2-20W



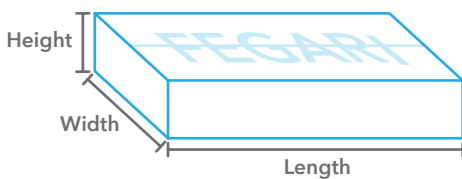
LUV DN2-40W



Product Size



Package Size



Model No	Size (L*W*H)	Net Weight	Gross Weight
LUV DN2-15W	860*398*160mm	12kg	15kg
LUV DN2-20W	1002*524*160mm	16kg	19kg
LUV DN2-30W	1252*524*160mm	19kg	22kg
LUV DN2-40W	1295*636*160mm	22kg	25kg
LUV DN2-50W	1451*636*160mm	24kg	27kg

Contact us

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