

G5L+ Tethered Lighting UAV



The use of UAVs with lighting functions in the industry is quite common. It is planned to be used 24/7 in various fields from the military sector to security forces and even search and rescue activities.

While the gendarmerie wanted to carry the wreckage of the vehicle that rolled into the traffic stockade behind the off-road vehicle for search and rescue activities, in order to determine the condition of a derailed train/wagon; The railway maintenance team wants the device to be carried on the back. Police search and rescue teams also request the option of carrying on the back for vehicles or people who have fallen into the sea, river or pond. Based on such needs, the G3L model was modified and transformed into the G5L+ model, which is portable on the back and will not be affected by rain, and was put on the market. A 900W power unit and a 520W LED lighting module are available.

The UAV, called G5L+, can reach an altitude of up to 30 meters. Flight can be provided with the control connected to the power unit. It provides one-handed control and management with its specially designed controller without the need for a professional UAV pilot. When the power is cut off, energy can be supplied from the battery for 5 minutes, and thanks to this feature, the cable can be collected thanks to automatic winding. In cases where there is no 110V ~ 220V mains voltage, it automatically shuts off at the end of the fifth minute. The power unit should be stored in a place with air flow, such as generators.

G5L+: Uninterrupted Lighting Power from the Sky

24/7 Uninterrupted Lighting Solution

520W

LED Power

3000m²

Effective Lighting Area

- ✓ Search and Rescue Operations
- ✓ Construction Sites and Industrial Areas
- ✓ Emergency Response Operations

SUPERIOR DURABILITY IN HARSH CONDITIONS



IP Protection Rating

IP54-level protection against dust and water.



Resistance

Class 6 wind resistance (13.8m/s) and Class 10 rain resistance.



Operational Altitude

Operational capability up to 4500 meters.



Flight Duration

Hours of uninterrupted flight with tethered power supply.



G5L+ Smart Control Unit

- One-handed ergonomic flight control
- Real-time lighting management
- GPS, BDS, GLONASS, and RTK support

Millimeter-level precise positioning.

Tethered Power Supply and Operational Readiness



900W Power Unit

Continuous power delivery with Tethered Power Box.

30m Cable

Safe altitude management with automatic reel system.

Quick Setup

Fully operational flight readiness within 5 minutes.

Safety Mode

Emergency battery for safe landing upon power failure.

G5L+ Tethered Lighting UAV

Aircraft Features

Product Name	:G5L+
Flight Altitude (m)	:30m
Automatic Take-Off / Landing	:Available (One-button)
Cruise Speed	:≥5.6 m/s (approx. 20 km/h)
Ascent Speed	:≥3 m/s
Descent Speed	:≥2 m/s
Emergency Landing Mode	:Yes, Automatic
Take-off Weight	:≤1 kg
Drone Size	:405 mm x 405 mm x 405 mm
Wind - Rain Class	:Class6 (10,8~13,8m/sn) - Class10 (10L/sn)
Protection Class	:IP54
Maximum Working Altitude	:4500 m
Operating Temperature (°C)	:-20°C - +50°C

Lighting LED Module Specifications

Lighting Unit Power (W)	:520W (4 sets of LED light units)
Lighting Source	:Power LED
Color Temperature(CCT)	:6500K
Color Rendering Index	:>70
Lighting Area	:3000m ²

Control Features

Communication Type / Cable Length	:Wired / 2 meters
Flight Control	:Offers simple operation with remote control
Satellite Number Control	:Available; GPS, BDS, GLONASS and RTK
Lighting On/Off	:Yes
Engine On/Off	:Yes

Power Unit Features

Input Voltage (AC)	:110V ~ 220V (±%20), 50/60Hz
Max. Power (W)	:900W
Assembly Time / Working Area	:5dk / 5m ²
Reel Winding - Release	:Yes, Automatic
Cable Length	:≥30 meters
Weight	:≤16 kg
Size	:610 mm x 520 mm x 255 mm

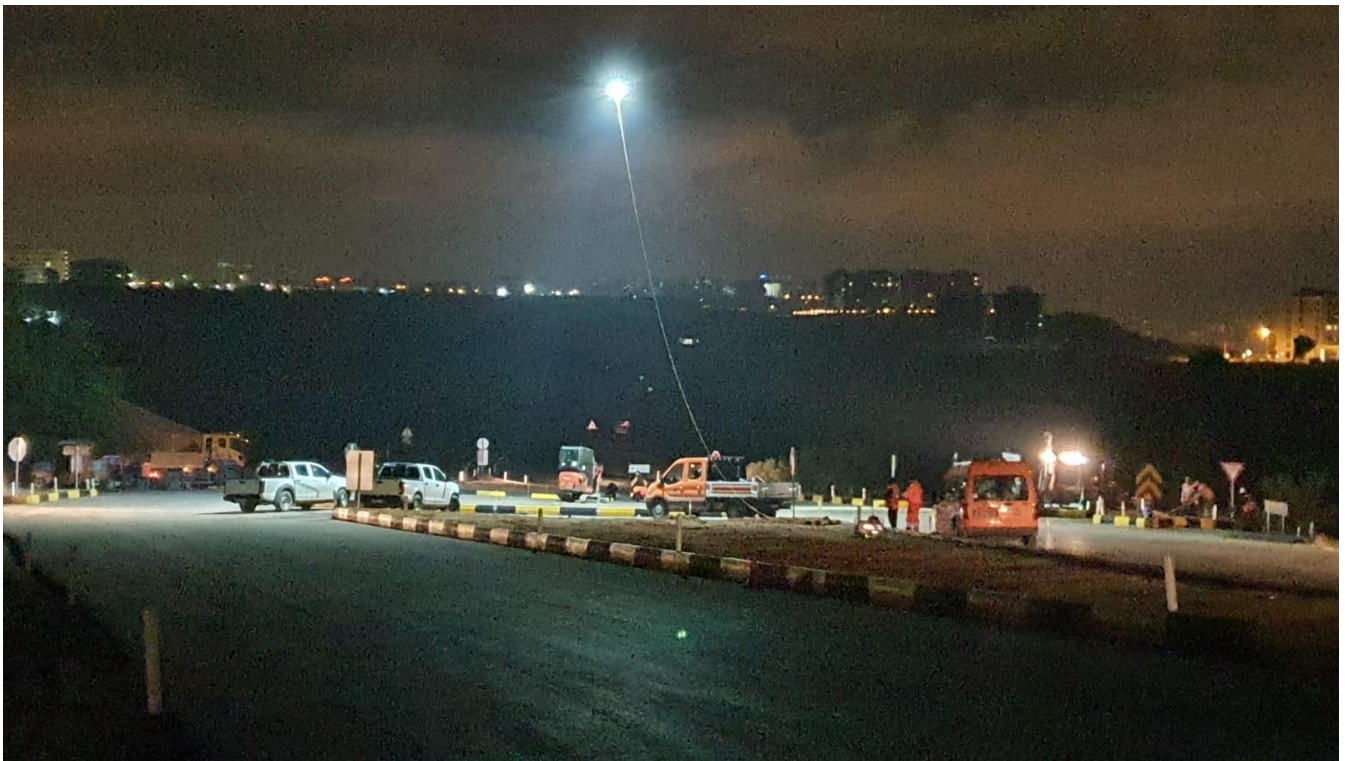
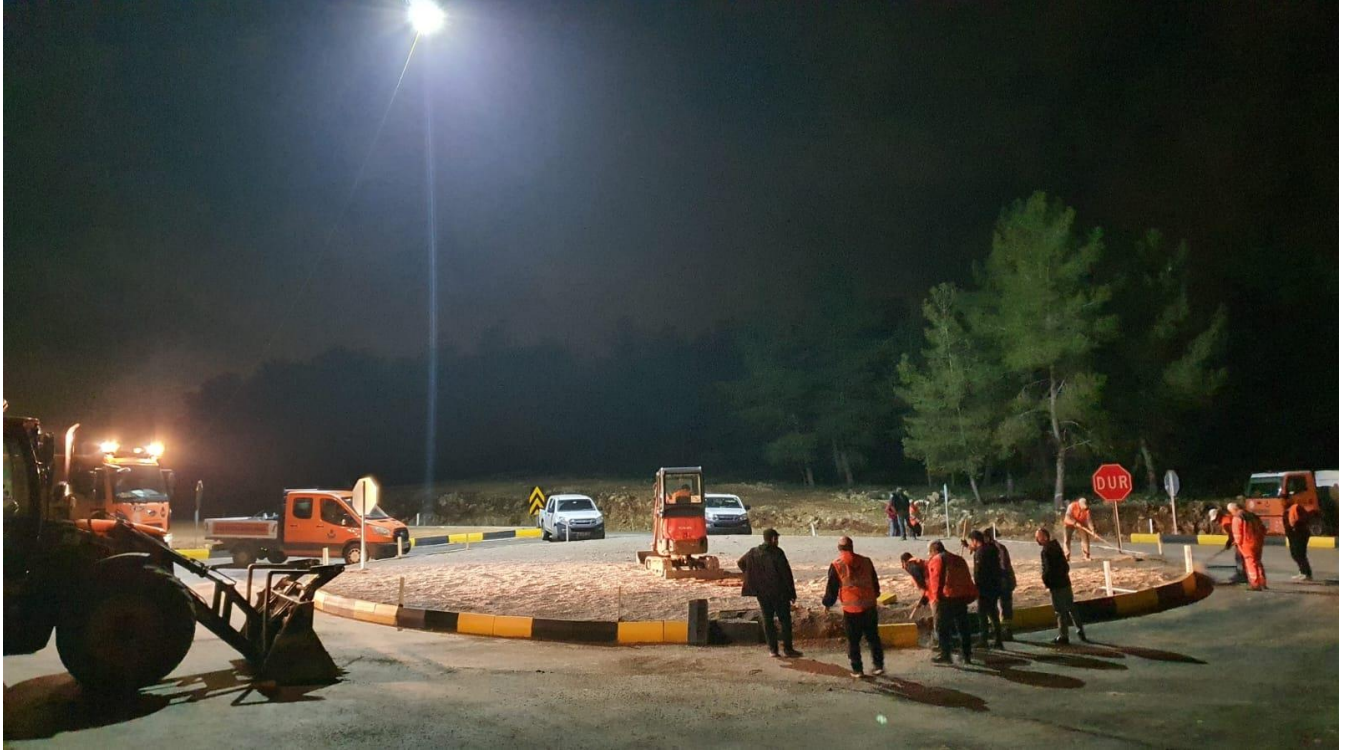


Product Order Information

Product Code	Payload	Power	Input Voltage	CCT/CRI	Departure Weight	Flight Duration	Dimensions	Cable Length
G5LP-04-RW-24-TET-30	Lighting	520W	110V ~ 220V (±%20), 50/60Hz	6500K / 70 CRI	920gr	24s	L610 x W520 x H255 mm	30 m

- Product average maximum power is 1.1 kW. You can use a generator or portable power station where there is no mains voltage.
- You can use the product for at least 1 hour with a 1200W Lithium Battery portable power station.
- You can also use it without interruption with a gasoline generator with a continuous power of at least 1.2kW. We recommend a generator due to price/performance and long-term use.

Application Visuals



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Lighting Test

In the illumination test performed by taking our wired illuminated aircraft to an altitude of 10m (AGL), 147lux was obtained on the ground, 68 lux at an altitude of 15m (AGL) and 41lux was obtained in the illumination measurement made while flying at an altitude of 20m (AGL). The visuals of the results of the measurements made with the Luxmeter at 10m, 15m and 20m are as follows.

Lighting Test Results

Height Distance	10meter	15meter	20meter
R0=0	147lux	68lux	41lux
R1=10 metre	50lux	32lux	27lux
R2=15 metre	17lux	14.8lux	15lux
R3=20 metre	7.8lux	6lux	7.5lux
R5=25 metre	2.9lux	3.3lux	3.8lux

