

G5L+ Tethered Lighting UAV



The use of lighting-equipped UAVs is quite widespread in industry. Their 24/7 continuous use is planned across various fields, from the military sector to security forces and even search and rescue operations.

The gendarmerie wanted to transport the wreckage of a vehicle that had rolled into a traffic ditch behind an off-road vehicle for search and rescue operations, while the railway maintenance team wanted the device to be carried on the back to determine the condition of a derailed train/wagon. Police search and rescue teams also wanted the option of carrying it on their backs for vehicles or people that had fallen into the sea, river, or lake. Based on these types of needs, the G3L model was modified and converted into the G5L+ model, which is portable on the back and rainproof, and was launched on the market. Like the G3L, it has a 1kW power unit and a 520W LED lighting module.

The UAV, named G5L+, can reach an altitude of up to 30 meters. Flight is controlled via a remote control connected to the power unit. It allows for one-handed control and management with its specially designed controller, eliminating the need for a professional UAV pilot. When the power is cut off, it can be powered by the battery for 5 minutes, and thanks to this feature, the cable can be collected automatically with the automatic winding system. In the absence of 220V AC mains voltage, it automatically shuts down after five minutes. The power unit must be stored in a place with airflow, such as generators.

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

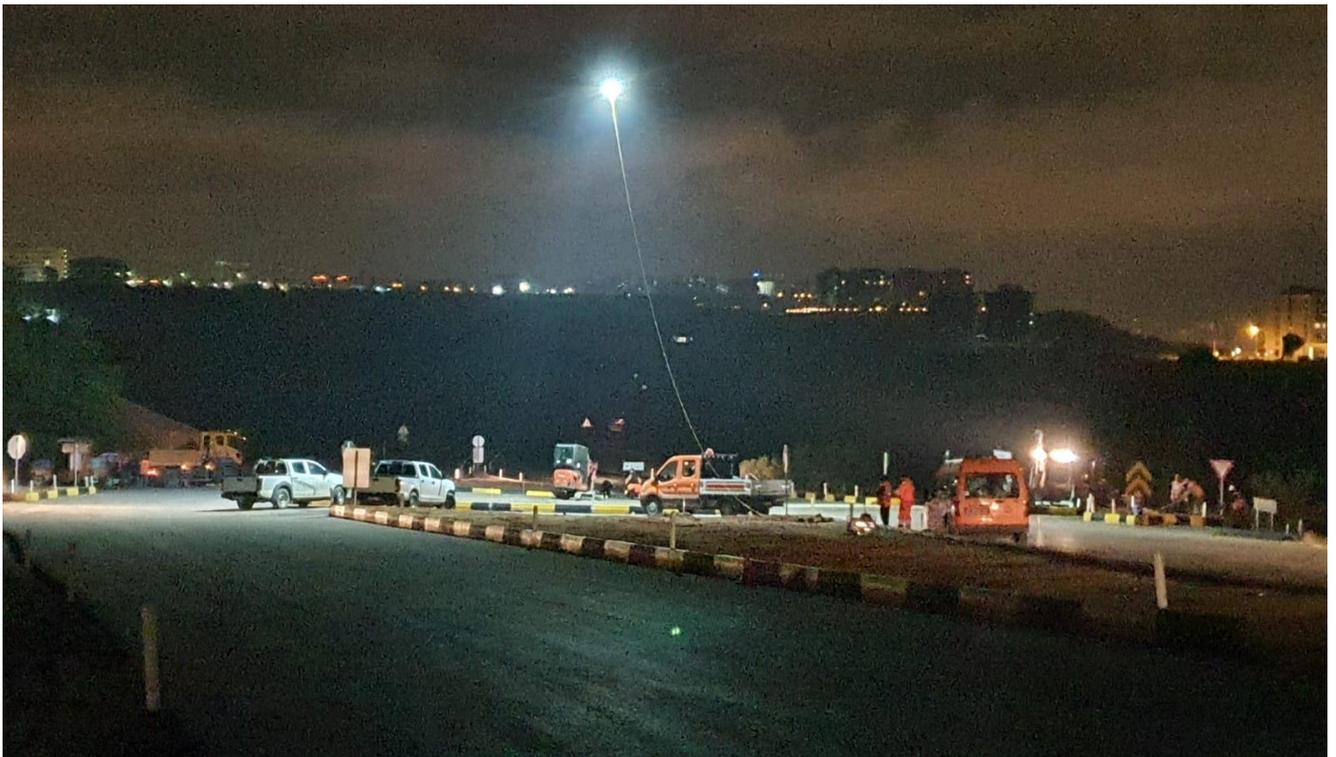


Product Order Information

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



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

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

