

LumiGuardian Solar Security Trailer

Overview

- Integrated Cloud-Based Recording*
- GPS Tracking**
- 4G LTE communication with built-in eSIM card***
- Autonomous Power for 7 to 10 Days Without Sun****
- One-Person Assembly
- Four (4) 12.8V Lithium Iron Phosphate Batteries
- Dual Charging: Solar Power or AC Charging
- Lockable and Secure Design
- C5-I Corrosion Protection
- Level 12 (Up to 73 mph) on the Beaufort Wind Scale
- IP67 Ingress Protection
- Department of Transportation (DoT) Approved

Warranty

- Trailer: Three (3) Years
- Solar Panels: Thirty (30) Years

Key Features

All-in-One Control Interface

The LumiGuardian solar mobile trailer seamlessly integrates with LumiCloud* for efficient, cloud-based recording. Users benefit from a streamlined platform where all essential functions and data are centralized. Additionally, it handles software updates automatically, removing the need for manual intervention.

Enhanced Cybersecurity with LumiCloud*

LumiCloud* offers robust cybersecurity measures. These safeguards prevent unauthorized access, data breaches, and ensure system reliability.



* LumiCloud platform for cloud-based recording is sold separately.
** GPS tracking is only available when using LumiCloud.
***Data plan sold separately.
****Time may vary based on energy consumption.

An Upclose Look at the LumiGuardian



Control Box

The mast has a control box to shield electrical components from damage. The weatherproof and waterproof box ensures the trailer's continuous operation. Attached to the box are two built-in speakers and mounts to deploy up to four (4) user-supplied cameras.



Storage Box

The storage box is able to hold all of the assembly elements of the trailer, making transportation and deployment easy and seamless.



Integrated Electrical Box

The integrated electrical box allows for on-site configuration and wiring to save time and enhance convenience.



Built-in Floodlight and Red and Blue Flashing Lights

The built-in floodlight illuminates the area around the trailer for sufficient lighting during recording. Red and blue flashing lights act as a visual deterrent and warning to ward off any potential trespassers and perpetrators.



460-Watt Monocrystalline PERC Silicon Solar Panels

The trailer comes with three (3) 460-watt monocrystalline silicon solar panels to autonomously power itself for 7 to 10 days without sun*** The panels have PERC technology to improve electron collection and light absorption for better performance and efficiency, especially in low light.

*** Time may vary based on energy consumption.



Rugged, Anti-Corrosive Build

The trailer is rated **C5-I** for corrosion protection, Level 12 (Up to 73 mph) on the Beaufort Wind Scale, and **IP67** for ingress protection. The trailer's mast is retractable, enabling flexibility and customization during setup. The mast's generous height of 8 m (26 ft) allows the installed cameras to see over obstructions and have a greater field of view.

Specifications

General

System Voltage	48 VDC	Corrosion Class	C5
PV Controller	MPPT 30A, 96.9%	Roof Rack Components	3 x Red and Blue Strobe Lights 2 x Speakers 1 x 4G Router 1 x Floodlight 1 x Power Supply Board (12/48 VDC) 1 x Edge Controller 1 x Hard Drive (4 TB) Note: No cameras are included.
IP Rating	IP67		
Control	Remote Control		
Battery Supply	Solar Power, Mains Electricity		
Charge Time	25 Hours (AC)		

Trailer Computer

System Frame	Embedded Linux System Watchdog Hard Disk Storage HDMI UHD Display IP Network Video Access	Audio Functions	Audio and Video Recording HDMI Audio Output APP Audio and Video Preview/Playback
Video Input	Supported Resolutions 16MP, 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 960P, 720P, D1, CIF Max. Input Eight (8) Cameras Access Bandwidth 256 Mbps	Audio Compression	G.711a, G.711u, PCM, G726
Video Playback	1/4/8 Simultaneous, APP	Storage	Built-in 4 TB HDD Cloud Backup Recording Type: Motion Detection, Alarm, Schedule, Intelligent, General
		Power Consumption	Total Output for NVR: ≤ 10W (No HDD) Total Output for PoE: 100 W Max. Output for One Port: 25.5 W

PV Controller

Nominal System Voltage	48 VDC	Relative Humidity	≤ 95%
Working Voltage Range	8 to 68 VDC	Self-Consumption	≤ 0.624%
Communication	RS-485 (RJ45 5 VDC/200 mA)	Certifications	FCC, UL

4G CPE

4G	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B9/B12/ B13/B17/B18/B19/B20/B25/B26/B28/B66 LTE TDD: B34/B38/B39/B40/B41	Power	12V DC 1A
SIM	1.8V/3V SIM/UIM Cards Built-In 15kV ESD protection	Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)
Port	LAN: Two (2) RS-485/RS-232: One (1)	Power Consumption	2.88 W (Max.)
		LAN Protocol	ARP, Ethernet
		WAN Protocol	IP, DHCP, PPPoE

Solar Panel

Number of Panels	Three (3)	Operating Temperature	-40 °C to 80 °C (-40 °F to 185 °F)
Solar Cell Type	Monocrystalline Silicon	Dimensions	1757.0 mm x 1134.0 mm x 30.0 mm (69.2 in. x 44.6 in. x 1.2 in.)
Wattage	460 W per Panel	Weight per Panel	21.5 kg (47.4 lb)
Voltage Range	10 to 40.9 VDC	Certifications	TUV, CQC, CE
Energy Efficiency	23.80%		

Battery

Number of Batteries	Four (4)	Operating Temperature	Charge: 0 °C to 60 °C (32 °F to 140 °F) Discharge: -20 °C to 60 °C (-4 °F to 140 °F)
Cathode Material	Lithium Iron Phosphate	Weight	4 x 17.5kg (4 x 38.6lb)
Voltage per Battery	12.8 V	Life Cycle	≥ 5000 Cycle at 25 °C, 0.5 C, and 80% DOD
Capacity	4 x 220 Ah		

Mast

Height	8.0 m (26.0 ft), Retractable	Coating	Electrophoretic Preservative
Control	Hand-Operated	Material	Aluminum Alloy
Beaufort Wind Scale	Level 12 (Up to 73 mph/118 kph)		

AC Charging

Voltage Range	90 to 264 VAC, 127 to 370 VDC	Optimal Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)
Frequency Range	47 to 63 Hz	Charging Protection	Low Voltage, Over Current, Over Voltage, Short Circuit, Over Temperature
Power	450 W	Certification	UL, TUV, EAC, CE, CB
Output Voltage	42 to 80 VDC (Adaptable)		
Output Current	6.8 A		

Trailer

Trailer Coupler	Suitable for 2 in. (50 mm) Trailer Ball	Packaging Dimensions	2200.0 mm x 1600.0 mm x 2389.0 mm (86.6 in. x 63.0 in. x 94.1 in.)
Speed Limit	Standard: 80 km/h (50 MPH) Maximum: 100 km/h (62 MPH)	Product Weight	< 780.0 kg (< 1719.6 lb)
Hand Brake	One (1)	Protection Measures	<ul style="list-style-type: none">Tamper-proof, removable hand crank for mast and PV bracketTheft-proof control box and trailer support footGPS positioning
Tire Type	Aluminum Rim, 175R13		
Support Legs	Four (4)		
Product Dimensions	3087.0 mm x 3464.0 mm x 7941.0 mm (121.5 in. x 136.4 in. x 312.6 in.)		



Ordering Information

LumiGuardian Trailer

The table below provides the SKU number for the LumiGuardian trailer and the extended warranty.

SKU	Product	Description
TG-113A	LumiGuardian Solar Security Trailer	Single Axle Trailer; Three (3) 460-Watt Monocrystalline Silicon Solar Panels; Four (4) 12.8V Lithium Iron Phosphate Batteries for 7–10 Hours of Autonomous Power; Retractable 26 ft. Mast; Integrates with LumiCloud for Cloud-Based Recording; C5 Corrosion Protection; Three (3) Red and Blue Flashing Lights, One (1) Floodlight, and Two (2) Speakers for Deterrence; Level 12 Beaufort Wind Scale (Resistant Against Winds up to 73 mph); IP67 Ingress Rating; Third-Party Camera Support; DoT Approved with VIN. For a full solar security solution, add a LumiCloud data plan and LCL-ST4.
TG-113A-1Y	LumiGuardian Solar Security Trailer Extended Warranty (1 Year)	One-Year Extended Warranty for the LumiGuardian Solar Security Trailer

LumiCloud Data Plans

The LumiGuardian is designed to be used with the LumiCloud platform to function as a complete security solution. A LumiCloud license and data plan enables the trailer's full functionality to act as a command center.

SKU	Product	Description
LCL-DATA10GU	LumiCloud 4G Data 10GB USA	LumiCloud 4G Data 10GB USA is an enterprise-grade data package designed to meet the high data demands of business users. It offers up to 10 GB of high-speed 4G data for one calendar month. This plan supports AT&T, Verizon, and T-Mobile cellular networks in the USA.
LCL-DATA100GU	LumiCloud 4G Data 100GB USA	LumiCloud 4G Data 100GB USA is an enterprise-grade data package designed to meet the high data demands of business users. It offers up to 100 GB of high-speed 4G data for one calendar month. This plan supports AT&T, Verizon, and T-Mobile cellular networks in the USA.
LCL-DATA200GU	LumiCloud 4G Data 200GB USA	LumiCloud 4G Data 200GB USA is an enterprise-grade data package designed to meet the high data demands of business users. It offers up to 200 GB of high-speed 4G data for one calendar month. This plan supports AT&T, Verizon, and T-Mobile cellular networks in the USA.
LCL-DATA10GC	LumiCloud 4G Data 10GB Canada	LumiCloud 4G Data 10GB Canada is an enterprise-grade data package designed to meet the high data demands of business users. It offers up to 10 GB of high-speed 4G data for one calendar month. This plan supports Rogers, Bell and Telus cellular networks in Canada.
LCL-DATA100GC	LumiCloud 4G Data 100GB Canada	LumiCloud 4G Data 100GB Canada is an enterprise-grade data package designed to meet the high data demands of business users. It offers up to 100 GB of high-speed 4G data for one calendar month. This plan supports Rogers, Bell and Telus cellular networks in Canada.
LCL-DATA200GC	LumiCloud 4G Data 200GB Canada	LumiCloud 4G Data 200GB Canada is an enterprise-grade data package designed to meet the high data demands of business users. It offers up to 200 GB of high-speed 4G data for one calendar month. This plan supports Rogers, Bell and Telus cellular networks in Canada.
LCL-ST4	LumiCloud Four-Channel Solar Security Trailer License	The LumiCloud Four-Channel Solar Security Trailer License is a 1-year license that enables the LumiGuardian to act as a complete security solution for outdoor surveillance. This license allows the trailer to support up to four channels and transmit information such as battery life, solar panel status, and location in real time.