

PORTABLE LIGHTING SYSTEMS

POLARIS



About us

Signalight is an international designer and manufacturer of lighting solutions such as heliport, airport, obstruction and portable lighting systems. Signalight is part of **Electro Max**, an important manufacturer of LED-based lighting, offering high-quality products. The company's headquarters is located in Petrosani, a picturesque town in Romania, in a modern facility with more than 50 employees.

Key Features

LED Technology

- No lamp changing for the entire lifetime of the light unit.
- low power, long autonomy

Battery

- Sealed Lead Acid or NiMH Battery
- Affordable
- Worldwide available
- 5 years lifetime

Controlling Modes

- 1.Local
- 2.Photocell
- 3.Radio
- 4.Handheld remote
5. PC software

Dimmable

continuously from 1% to 100%

Signal

- synchronized flashing - 20-60 fpm continuous setting
- steady

Maximum autonomy

29 days

Drop-in Charging System

no connectors needed

Charging Level Indicator

on the front panel of each lighting fixture

Light output

Available in **Low, Medium, and High intensity**, compliant international and regional standards, including **ICAO, FAA, TP 312E, and Australia Part 139**

Sensors

- 1.Photocell sensor
- 2.Temperature sensor
- 3.GPS
- 4.Clinometer

POLARIS Versions and Models

Polaris lamps are battery-powered, robust, and reliable fixtures that combine long-life LED technology with a rechargeable battery for effortless installation and maintenance. With low energy consumption and optional features such as solar panels, radio control, GPS, and ARCAL activation, they ensure maximum flexibility across a wide range of operations.

Polaris lamps are available in three versions – V1, V2, and V3 – each designed to meet specific operational requirements.

POLARIS Versions



V1



V2



V3

POLARIS Models

Airport models	Heliport models
Threshold End	TLOF
Threshold	Approach
Approach	Taxiway
Taxiway	Fato
Runway Edge	
Runway End	
Unserviceability	
Emergency	
RTIL	

POLARIS - V1



Polaris V1 is a lightweight, easy-to-handle portable lamp, designed to simplify deployment and operation. Its compact polycarbonate body makes it exceptionally light and easy to maneuver, while its straightforward installation and low-maintenance design allow for rapid setup.

POLARIS - V2



Polaris V2 is engineered for performance and efficiency in any environment. Its compact aluminum design provides a space-saving solution without compromising strength. The robust construction ensures enhanced durability even under intensive use, making it ideal for demanding conditions.

POLARIS - V3



Polaris V3 is a versatile portable lamp designed for flexible deployment in diverse environments. Its durable aluminum body ensures long-lasting performance, while the four built-in solar panels provide efficient, sustainable energy for extended operation. Polaris V3 combines robustness with adaptability, making it ideal for projects requiring reliable illumination and eco-friendly power solutions.

Charging Methods

Polaris lamps offer flexible charging options to suit any operational need. They can be charged via AC, DC, drop-in, or solar power, using either the built-in panels or external solar panels, ensuring reliable and convenient power in any situation.

AC Charging

AC Charging allows the lamp to draw power directly from standard mains electricity. This ensures a reliable and consistent energy source, making it easy to recharge your Polaris lamps wherever a wall outlet is available. Designed for convenience, it keeps your lamps ready for operation with minimal effort.

DC Charging

DC Charging allows the lamp to be powered directly from DC sources, such as vehicles, batteries, or generators. This ensures reliable charging in remote or mobile setups, providing flexibility wherever AC power is unavailable. Fast and convenient, it keeps your Polaris lamps operational in any environment.

Drop-in Charging

Drop-in Charging: Quick and effortless charging is achieved by simply placing the lamp in the dock. This method ensures fast power restoration with minimal effort. Designed for speed and convenience, it allows your Polaris lamps to be ready for use in no time.

Solar Charging



Solar Charging: Polaris lamps can be charged using either built-in solar panels or external solar panels. This eco-friendly option provides reliable, sustainable power, making the lamps ideal for remote locations or off-grid operations. Designed for convenience and efficiency, it ensures your Polaris lamps stay ready whenever needed.



Control

Polaris lamps offer versatile control options to suit any operational need. They can be managed manually via built-in buttons on the casing, remotely using one-way radio for simple command transmission, or through advanced bidirectional radio communication with GPS-enabled monitoring and software-based scheduling. This ensures maximum flexibility, convenience, and reliability in any deployment scenario.

Manual Control



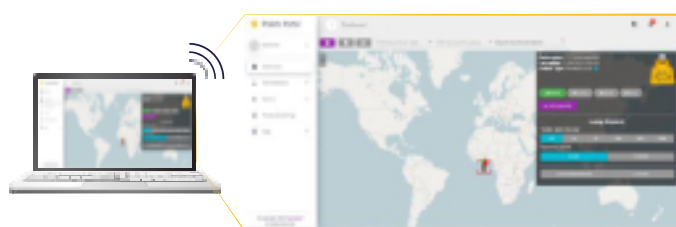
Each Polaris lamp features built-in control buttons on the casing, allowing users to easily adjust brightness, switch modes, and turn the unit on or off directly, without the need for external software.

Radio One-way Control



Enables simple and reliable remote control by transmitting commands directly to the lamps without requiring feedback, providing efficient communication for managing multiple units over a dedicated radio channel.

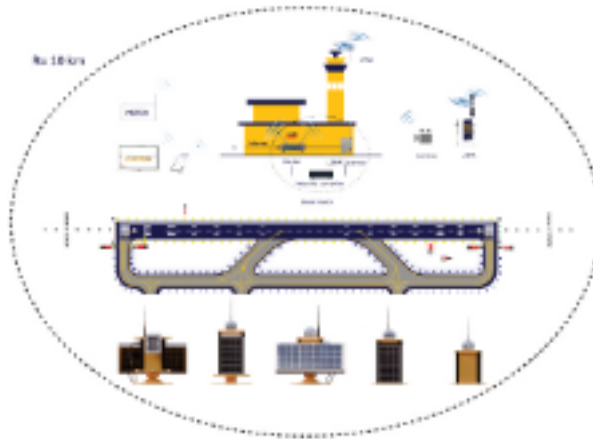
Radio Two-way Control



The system uses bidirectional radio and built-in GPS to monitor and control each fixture. Users can check battery status, adjust brightness and modes, control units individually or in groups, and schedule automatic on/off or mode changes. Low battery triggers automatic intensity reduction to extend operation.

POLARIS System

Airfield Portable Light Marking System POLARIS 2.0. features versatile signal lamps with magnetic assembly, resilient materials for all-weather use. Runs on independent or solar power, communicates via LORA. Includes base station, web app, remote control, video monitoring, weather station.



The POLARIS can be used as a standalone fitting or as part of a complete Transportable Runway Lighting Kit. The POLARIS Lighting kit is used to set up a temporary or semi-permanent lighting system in order to allow aircraft to land on grass strips, frozen lakes, roadways or as emergency runway lighting on major airports. Using optional IR LED sources, the system can also be NVG compatible. The Polaris meets the standard of International Civil Aviation Organization (ICAO) Annex14, Federal Aviation Administration FAA (specifically: FAA AC 150/5345-46D; FAA AC 150/5345-50B for portable runway lighting).

○ RTIL



AL-080-24-WH

◼◼ Runway Guard Light



AL-026-48-XX
(XX = RE or AM)

◼◼ Location and Runway hold position



AL 070-XXX-XX

◯◯◯ PAPI/APAPI



AL 088-30-WH-RE

◼◼ Windcone



AL-081-XX

◼◼ Direction



AL 070-XXX-XX

Solar Power System



AL-152-AX



Signalight

**Safely guiding
your way**

2026