

# AUTONOMOUS LIGHTING

## Airport application



### APPLICATION

EFIA autonomous lighting systems are battery-powered and equipped with solar panels. They communicate by radio link via a ZigBee Mesh protocol at 868Mhz. They enable airfield lighting to be carried out on runway edges, thresholds and ends, as well as taxiway edges, in accordance with the photometric standards for VFR and non precision approach. Other equipment such as REILS lights, runway guard lights, luminous guidance signs, and wind cones complete these features.

Equipment deployed on the runway can be controlled using a multifunction mobile remote control or the CAESAR touch-screen software interface (ALCMS) . This interface enables to control and monitor individually or by group all the marking equipment from the control tower via a dedicated industrial automaton, but also from any other remote device connected to CAESAR: smartphone, tablet, PC...



## ✦ AUTONOMOUS SYSTEMS BENEFITS

Autonomous systems show numerous advantages over wired systems :

- **Installation:** simplification and reduction of installation and commissioning times, by avoiding civil engineering over several kilometers (trenches), interconnections on each light and power supply and emergency systems.
- **Reliability:** individual control of the light allowing to know the battery's state of autonomy and performance, the solar panels' and the charge controller's efficiency, in order to implement preventive maintenance and anticipate any energy failure. The light do not depend on a common current loop.
- **Maintenance:** simplified work due to the absence of cable and connections. No electrical risk (very low voltage). Replacement of light via a simplified pairing procedure.
- **Mobility:** equipment adapted for temporary, events, mobile, military applications etc. using a mobile charging trailer.
- **Ecology:** solar power, no civil engineering, recyclable products.
- **Cost:** reduction of installation, commissioning and operating costs.

## ✦ TERMS OF USE

- **Field of application:** suitable for aerodromes using LI lighting, for a VFR or non precision approach.
- **Sunlight:** the area of use must have a sufficient solar power supply regarding the period and intensity of the light usage required for the operation.

## ✦ AIRFIELD AUTONOMOUS PRODUCTS RANGE

MATERIEL	REFERENCE	LIEN
<b>AIRFIELD LIGHTING</b>		
• LI runway edge light	FELUN-RWY-EDG-LI-C	<a href="https://efi-airport.com/product/autonomous-elevated-">https://efi-airport.com/product/autonomous-elevated-</a>
• MI runway edge light	FELUN-RWY-EDG-MI-C	<a href="https://efi-airport.com/product/autonomous-elevated-">https://efi-airport.com/product/autonomous-elevated-</a>
• LI runway threshold light	FELUN-RWY-TH-LI-G	<a href="https://efi-airport.com/product/autonomous-elevated-">https://efi-airport.com/product/autonomous-elevated-</a>
• LI runway end light	FELUN-RWY-END-LI-R	<a href="https://efi-airport.com/product/autonomous-elevated-">https://efi-airport.com/product/autonomous-elevated-</a>
• LI runway threshold end light	FELUN-RWY-THEND-LI-GR	<a href="https://efi-airport.com/product/autonomous-elevated-">https://efi-airport.com/product/autonomous-elevated-</a>
• Taxiway edge light	FELUN-TWY-EDG-LI-B	<a href="https://efi-airport.com/product/autonomous-elevated-">https://efi-airport.com/product/autonomous-elevated-</a>
• Obstruction light	FELUN-MISC-OBS-LIA-R	<a href="https://efi-airport.com/product/autonomous-elevated-">https://efi-airport.com/product/autonomous-elevated-</a>
• RTILS light	LUCIOL-RTILS	<a href="https://efi-airport.com/product/runway-threshold-">https://efi-airport.com/product/runway-threshold-</a>
• SFLS light	LUCIOL-SFLS	<a href="https://efi-airport.com/product/sfls-copie/">https://efi-airport.com/product/sfls-copie/</a>
• Runway guard light	WIGWAG	<a href="https://efi-airport.com/product/runway-guard-light/">https://efi-airport.com/product/runway-guard-light/</a>
• Guidance sign : information	PSLIM-INF-SL	<a href="https://efi-airport.com/product/panneau-de-signalisation">https://efi-airport.com/product/panneau-de-signalisation</a>
• Guidance sign : mandatory	PSLIM-MAN-SL	<a href="https://efi-airport.com/product/guidance-sign-mandatory">https://efi-airport.com/product/guidance-sign-mandatory</a>
• Guidance sign : distance marker	PSLIM-DIS-SL	<a href="https://efi-airport.com/product/guidance-sign-distance-">https://efi-airport.com/product/guidance-sign-distance-</a>
• Wind cone	ZEBRA	<a href="https://efi-airport.com/product/windcone/">https://efi-airport.com/product/windcone/</a>
<b>COMMAND CONTROL</b>		
• ALCMS CAESAR	CAESAR-ALCMS	<a href="https://efi-airport.com/product/alcms/">https://efi-airport.com/product/alcms/</a>
• Portable multi function remote	CAESAR-FHCMAXI	<a href="https://efi-airport.com/product/felun-portable-">https://efi-airport.com/product/felun-portable-</a>
<b>ACCESSORIES</b>		
• Rack charging station		
• Mobile charging trailer	KANGARO	<a href="https://efi-airport.com/product/mobile-charging-trailer/">https://efi-airport.com/product/mobile-charging-trailer/</a>
• Mounting support	FIX	
<b>HELIPAD LIGHTING</b>		
See « <a href="#">Balisage autonome helistation_Fr.pdf</a> » for more information		