Polaris EmergencY (RGBW)

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Compliance to standards	**ICAO:** International Civil Aviation Organization, Airports, Annex 14, Vol. 1 **IEC TS 61827:** Electrical installations for the lighting and signaling of aerodromes. Characteristics of recessed and raised luminaires used at aerodromes and heliports.
Application	Battery-powered Omnidirectional emergency lights are specially crafted for deployment in airports and heliports as temporary substitutes for malfunctioning units within the primary lighting system. The POLARIS design has been done in such way as to provide maximum safety. It is a reliable and flexible product, being easy to fit into any kind of infrastructure.
Features	Designed and built with simplicity and ease of maintenance in mind. High power LED technology (100 000 hrs lifespan). IRLED - optional. Lightweight, low-energy and environment friendly lighting fitting. Lead Acid battery These lights feature a single RGBW LED capable of emitting a wide range of colors—including red, green, blue, and white—allowing for customization according to specific signaling needs or regulations.
Product Code	**AL - 152 - 01 – RGBW** Series Indicator (Airfield Lighting) **AL** Product Indicator **152** LEDs Number **01** LEDs Light Color (RED) **RGBW**

Description

Housing - Powder coated aluminum RAL 1004 (aviation yellow)
Disperser – Polycarbonate
Cable gland - nickel plated brass
Fasteners - stainless steel

Light fixtures are provided with anti-condensation valve.

The lights can be used as:

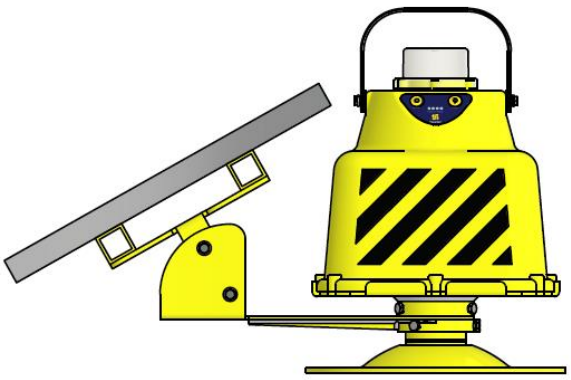
UNSERVICEABILITY, END or STOP light	RED
TAXI light	BLUE
TLOF or THRESHOLD	GREEN
FATO or RUNWAY edge light	WHITE

Environment

Temperature range:	- 55° to +55°
Degree of protection:	IP 68
Humidity:	0-100%

Mounting

The device can be installed directly on the ground, on a frangible support or on a frangible support + solar panel.



Local/manual Control

Following installation, press the ON/OFF button to connect the battery, thereby powering the POLARIS unit. Once the unit is powered, the yellow LED on the SIGNALIGHT LOGO will blink every 5 seconds, indicating that the light is in STANDBY mode.

Press the "Light" button to activate the MAIN LEDs. The first press will display the battery's charge level through the 4 signal LEDs:

Battery Charged 75-100%	Battery Charged 50-75%	Battery Charged 25-50%	Battery Charged 0-25%

The display showing the battery's charge level will turn off after approximately 10 seconds, and the status LEDs will go dark. Pressing the "Light" button again activates the MAIN LEDs in RED. A subsequent press causes the RED LED to blink five times, after which the light will operate based on the photocell, illuminating only at night in RED. Pressing the "Light" button again switches the LED to BLUE; another press and the blue LED blinks five times, setting the light to operate with the photocell at night in BLUE. A further press changes the LED to GREEN; pressing again makes the GREEN LED blink five times, enabling night-time operation in GREEN based on the photocell. Another press of the "Light" button turns the LED WHITE. Pressing again results in the WHITE LED blinking five times, after which the light will function with the photocell at night in WHITE. Pressing the button once more turns off the light, and the POLARIS unit enters STANDBY mode. When the light is in STANDBY, the LOGO's yellow LED will blink once every 5 seconds. When the light operates based on the photocell, the LOGO's yellow LED will blink every 5 seconds.

Disconnecting the battery

Holding down the "Light" button for more than 3 seconds will disconnect the battery. This step is advised when the lamps will not be used for an extended period or during transportation to ensure there is no power consumption. Prior to disconnection, the main LEDs will blink three times as an indicator. Once the battery is disconnected, the LED on the logo will turn off. To protect the battery from over-discharging and potential damage, if the battery voltage drops below 10.2 volts, it will automatically disconnect.

HANDHELD RADIO REMOTE CONTROL

The remote control, powered by batteries, can simultaneously transmit commands to all the lights. To extend the battery's life, switch off the remote when it's not in use. If the remote control is powered the status LED from the right is ON. Pressing the RED button activates the lights in red, and similarly for other colors. To turn off the lights, press the OFF button. For photocell mode activation, press a color button followed by the BLACK button. The chosen LED color will blink five times and then turn off, automatically illuminating when darkness falls. After each push, for a command, the LED status from the left lit for few seconds until the order is transmitted. One can send another command just after the status LED is OFF.

Electrical Characteristics

Power supply: Power supply is provided by rechargeable Lead Acid battery 12V - 12 Ah

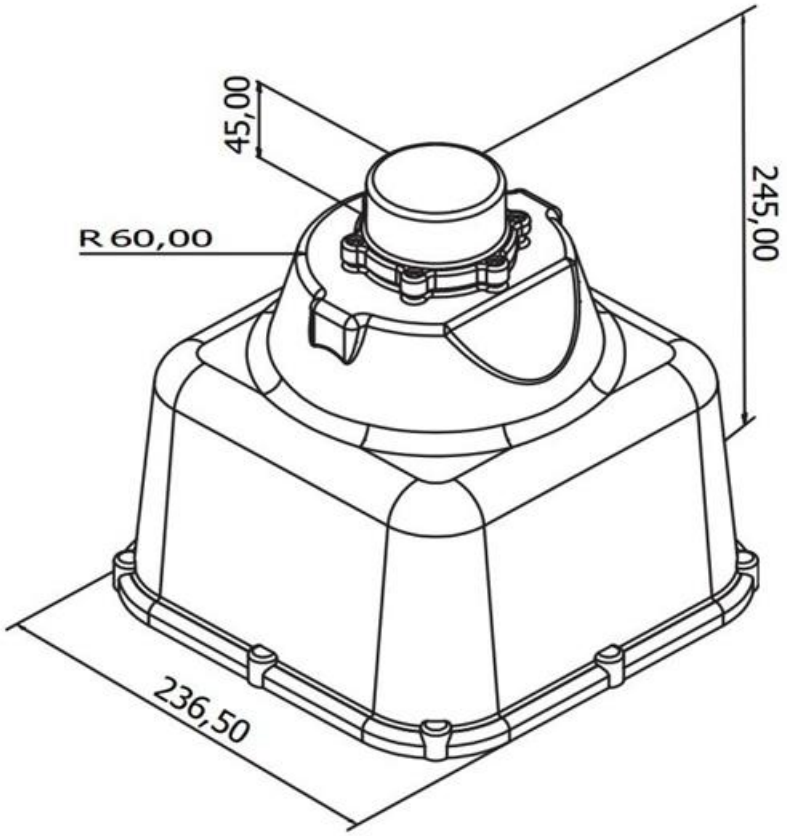
Power consumption: The energy consumption of a POLARIS light varies based on the color of the LED used:

1W for red light
0.3W for blue light
1.5W for both green and white lights

With a fully charged battery holding around 144 watt-hours (Wh), the operational autonomy of the lamps can be estimated as follows: around 144 hours for red light, 480 hours for blue light, and 95 hours for both green and white lights, assuming the battery is new, fully charged, and operating in an ideal temperature of 20 degrees Celsius.

Mechanical Characteristics

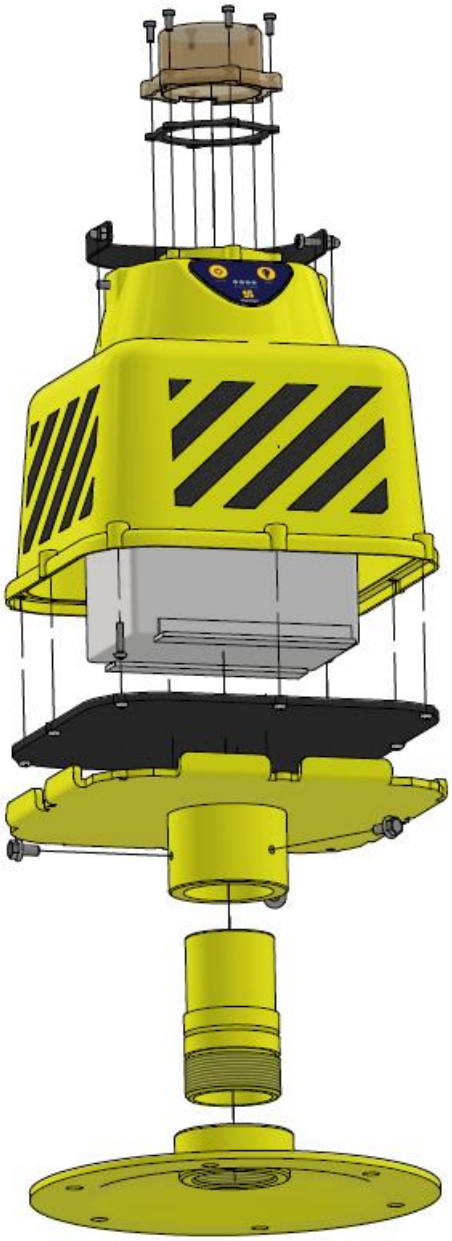
Width: 236.5 mm
Total height: 245 mm
Weight: 5.9 kg



Photometric Characteristics

UNSERVICEABILITY, END or STOP light	RED	10 cd omnidirectional
TAXI light	BLUE	2 cd omnidirectional
TLOF or THRESHOLD	GREEN	50 cd omnidirectional
FATO or RUNWAY edge light	WHITE	100 cd

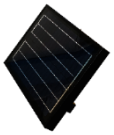
Spare Parts



1. IMBUS M3 screws (AL-176-AX)
2. Polycarbonate disperser (AL-177-AX)
3. Rubber gasket (AL-178-AX)
4. Handel (AL-179-AX)
5. POLARIS case (AL-180-AX)
6. 12V/12 A Battery (AL-181-AX)
7. Base plate charging pads (AL-182-AX)
8. Polaris support (AL-183-AX)
9. Frangible coupling (AL-101-AX)
10. Base plate (AL-102-AX)

Accessory

To order accessories please call our customer support. For contact details please refer to our website - www.signalight.com

#	NAME - SERIES	PRODUCT CODE	IMAGE
1	Polaris Solar panel stand	AL-123-AX	
2	Polaris base plate	AL-124-AX	
3	Drop-in charger	AL-125-AX	
4	Drop-in rack	AL-126-XX-AX	
5	Polaris – Photo Voltaic Panel	AL-141-AX	
6	Polaris Remote Control	AL-165-EM-AX	
7	Charger for Polaris	AL-199-XX-AX	

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