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TECHNICAL DATASHEET · AIRPORT & HELIPORT LIGHTING · GUIDANCE SYSTEM

Visual Alignment Guidance System (VAGS)

EcoSolaris code **ECO-AL-125** | Ordering code **AL-087-02-WH** | **Made in Romania** Manufactured in the EU



A system of two LED flashing units installed symmetrically on both sides of the runway threshold or TLOF. It gives the pilot a combined signal of approach azimuth guidance and threshold identification: on the axis the flashes are simultaneous, off the axis they appear in sequence, showing the direction to the correct track.

ORDERING CODE	CONFIGURATION
AL-087-02-WH	**2 flashing units (master and slave)**
LIGHT SOURCE	FLASH FREQUENCY
2 focused high-power LEDs, cool white	**1 Hz per unit**

Price on request | EcoSolaris technical support · Dubai

Technical specifications

Ordering code	AL-087-02-WH
Configuration	2 flashing units (master and slave)
Light source	2 focused high-power LEDs, cool white
Average light intensity	40,000 cd (equal to or better than APAPI white intensity)
Flash frequency	1 Hz per unit
On-axis sector (simultaneous flashes)	1° (±0.5° from the approach axis)
Guidance sector (sequenced flashes)	30° (±15°), variable delay 0–330 ms
Vertical distribution	10° above horizontal
Light colour	white (x = 0.348; y = 0.360)
Brightness steps	10%, 30%, 100% (remote controlled)
Power supply	48 V DC from controller (dimmable 100/30/10%) or 110–230 V AC, 50/60 Hz (non-dimmable)
Power consumption	max. 25 W
Monitoring	RS485 link between units, 2 dry contacts (one per unit)
Degree of protection	IP65
Operating temperature	-20 °C to +50 °C (-50 °C to +50 °C with heating)
Height	900 mm
Maximum diameter	305 mm
Light axis height	650 mm
Horizontal adjustment	rotation ±7.5°
Mounting	frangible bolts, levelling via the fastening system

Features

- Combined approach azimuth guidance and threshold identification
- Sequence effect showing the pilot the direction of the axis
- Both units switch off automatically on failure, with a signal to the control room
- High-power LED technology, low energy consumption
- Anti-condensation valve in the light fixtures
- Optional heating for cold and wet environments
- Lightweight aluminium alloy construction, easy maintenance

Standards and compliance

- ICAO Annex 14, Volume II – Heliports, 4th Edition, 5.3.5
- ICAO Annex 14, Vol. II, Figure 5-13 (light distribution) and Paragraph 5.3.5.13 (intensity)
- ICAO Annex 14, Vol. II, Paragraph 5.3.5.18 (shutdown and fault signalling)
- ICAO Annex 14, Vol. I, fig. A1-1b – colours for aeronautical ground lights (solid state)
- Salt mist tested to IEC 60068-2-11 and IEC 60068-2-25

Materials and construction

- Housing: powder-coated aluminium, RAL 1004 (aviation yellow)
- Diffuser: hardened glass
- Cable gland: nickel-plated brass
- Fasteners: stainless steel

Configuration options

- Power supply: 110–230 V AC, 50/60 Hz from mains / parallel lighting circuit; 24 V DC; 2.8–6.6 A from CCR
- Cable gland: chrome-plated, stainless steel or plastic
- Cable length: 1 m or 2 m
- Heating for cold and wet climates

Ordering code structure

AL - 087 - 02 - WH

AL	Series indicator: Airfield Lighting
087	Product indicator: Visual Alignment Guidance System
02	Number of LEDs: 2
WH	Light colour: cool white

Compatible accessories

AL-101-AX	Frangible coupling
AL-115-AX	Clinometer
AL-127-AX	Frangible bracket
AL-116-AX	Low profile kit

Applications

Heliports – approach track guidance towards the TLOF · **Airports – runway threshold identification** · **Hospital and rooftop heliports** · **Offshore platforms and industrial sites**