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TECHNICAL DATASHEET · AIRPORT & HELIPORT LIGHTING · VISUAL APPROACH GUIDANCE

PAPI – Precision Approach Path Indicator

EcoSolaris code **ECO-AL-1877** | Ordering code **AL-119-28-WH-RE-XXX** | **Made in Romania** Manufactured in the EU



The PAPI unit gives the pilot precise visual information on the approach slope, so the approach can be flown accurately and safely. The units are used to build PAPI or APAPI systems for airports and heliports: more red lights mean the approach is too low, more white lights mean it is too high.

ORDERING CODE	LEDS
AL-119-28-WH-RE	**28, white and red (OSRAM)**
POWER CONSUMPTION	48 V DC SUPPLY
max 50 W per unit	**from controller, dimmable 100%, 30%, 10%**

Price on request | EcoSolaris technical support · Dubai

Technical specifications

Ordering code	AL-119-28-WH-RE
LEDs	28, white and red (OSRAM)
Power consumption	max 50 W per unit
48 V DC supply	from controller, dimmable 100%, 30%, 10%
110-230 V AC supply	50/60 Hz, dimmable via contacts 100%, 30%, 10%
2.8-6.6 A series supply	from CCR via isolating transformer, dimmable via current 100%, 30%, 10%
Vertical aiming angle	up to 12°
Digital inclinometer	built-in, factory-set zero, with display and button
Misalignment alarm	deviation > 0.5° – LEDs switch off, alarm raised
White chromaticity	x = 0.347; y = 0.370
Red chromaticity	x = 0.698; y = 0.302
Temperature range	-40° to +55°
Degree of protection	IP65
Humidity	0-100%
Mounting	frangible couplings
Packaging	ISPM 15 wooden crate, 650 x 500 x 1400 mm, 26 kg

Features

- High-power LED technology, OSRAM white and red LEDs with dedicated optics
- Built-in digital inclinometer, factory calibrated; field position saved with one button
- Automatic switch-off and alarm on deviations above 0.5°
- Alarm shown on the Controller V3 display (AL-078-AX)
- Hardened front glass with sandblast protection
- Three power supply types, all dimmable 100% / 30% / 10%
- Lightweight aluminium-alloy body, simple maintenance

Standards and compliance

- ICAO Annex 14, Volume I – Aerodromes (7th edition, July 2016)
- Photometry: ICAO Figure A2-23 – light intensity distribution of PAPI and APAPI
- Chromaticity: ICAO Section 5.3.5.30
- Colours to ICAO Annex 14 Vol. I, fig. A1-1b (solid-state lighting)

Materials and construction

- Housing: powder-coated aluminium, RAL 1004 (aviation yellow)
- Fastening system: powder-coated aluminium, RAL 1004
- Anti-glare visor: powder-coated aluminium, RAL 9005 (gloss black)
- Front glass: hardened glass, sandblast protection
- Cable gland: nickel-plated brass

Configuration options

- 48 V DC supply from controller (3-core cable: V+, V-, dimming)
- 110-230 V AC, 50/60 Hz supply direct from mains
- 2.8-6.6 A series supply from CCR via isolating transformer
- Cable gland: chrome-plated, stainless steel or plastic
- Cable length: 1 m or 2 m

Ordering code structure

AL - 119 - 28 - WH-RE

AL	Series indicator (airfield lighting)
119	Product indicator – PAPI
28	Number of LEDs
WH-RE	LED colour: white and red

Compatible accessories

AL-115-AX	Clinometer
AL-173-AX	Tripod

Applications

PAPI systems for airport runways · **APAPI systems for smaller aerodromes** · **Approach slope guidance at heliports** · **Civil and military aerodromes**