

AV72

Radio Controlled Solar Aviation Light with Tactical IR Mode & 128bit Encryption

Features

- 2.4GHz worldwide accepted radio control
- 128bit security encryption
- NGV compatible using IR LEDs
- 3-step intensity adjustment
- High capacity replaceable battery pack
- Made from tough, durable LEXAN® polycarbonate
- Dual internal solar panels for enhanced charging

Typical Applications

- Solar Airstrip Light
- Solar Barricade Light
- Solar Taxiway Light (ICAO)
- Solar Threshold Light

Compliance

- ICAO Annex 14 Volume 1, 'Aerodrome Design and Operations', Forth edition July 2004, paragraph 5.3.17.7
- FAA AC5345-46D L861T (High Intensity Mode)
- FAA AC5345-50B L863 (High Intensity Mode)
- CASA Manual of Standards Part 139 paragraph 9.13.15.1 and 9.13.15.3 Section 9.2.2.1 (High Intensity Mode)



The AV72 is a self-contained solar powered omni-directional aviation light with tactical IR mode, 128bit encryption and encrypted 2.4 GHz radio control. The AV72 solar powered LED airfield light has an internal RF module and antenna to receive encrypted command messages from the handheld radio controller.

The units provide NVG compatible visible and infrared LED outputs for portable, permanent or sustained operations. Lights can be controlled from a secure world-wide compatible 2.4 GHz RF link from the ATC tower from the aircraft (via ALSCU with an encrypted VHF radio link) or set for dusk-dawn automatic operation.

The radio system uses a mesh network to expand the working range indefinitely.

Lights can be assigned to a light group (up to 16 distinct groups) to allow individual control of separate light groups (runways, helipads, taxiways, obstruction) within an airfield or for multi faceted covert and overt operations.

The AV72 has 3 radio-controlled intensity settings, and can be set from dusk-till-dawn, medium intensity, or temporary-high mode for tactical operations. When set to temporary-high the light complies with L861T photometrics.

The AV72 offers enormous benefits over traditional battery and hard-wired airfield lights including low maintenance and no underground cabling.

The unit has twin high-performance solar modules mounted within the lens, which maximize solar collection and provide reliable operation in a range of environmental conditions.

The model will operate maintenance-free for many years, and has been tried and tested in some of the world's most demanding regions including Iraq, Afghanistan, and the Australian Outback.



SPECIFICATIONS •

Light Characteristics

Light Source 12 visible ultra-high intensity LEDs and 6 infrared LEDs
 Available colours Red, Green, White, Yellow, Amber, Blue, Sectored Combinations
 Peak Intensity (cd)† Steady-on: Blue - 2.8 Red - 6.8 Green - 9.0 White - 7.0 Yellow - 6.5
 Flashing: Blue - 5.5 Red - 18.2 Green - 21.9 White - 19.1 Yellow - 15.1
 Horizontal Output (degrees) 360
 Vertical Divergence (degrees) 0 to +7
 Reflector Type Omnidirectional 360° LED Reflector
 (US Pat. No. 6,667,582. AU Pat. No. 778,918)

Available Flash Characteristics >250 including steady-on (user-adjustable)
 Intensity Adjustments Adjustable LOW / MEDIUM / HIGH
 LED Life Expectancy (hours) >100,000

Electrical Characteristics

Operating Voltage (v) 3.6
 Temperature Range -40 to 80°C

Solar Characteristics

Solar Module Type Multicrystalline
 Output (watts) 2.5 (2 x 1.25watt)
 Solar Module Efficiency (%) 14
 Charging Regulation Microprocessor controlled

Power Supply

Battery Type High grade NiMH – Environmentally friendly
 Battery Capacity (Ah) 16
 Nominal Voltage (v) 3.6
 Autonomy (nights) Steady-on: >20 Low intensity dusk-till-dawn mode

RF Flash Synchronisation

Frequency 2.4Ghz ISM Band
 Range 1.4km between 2 lights, relayed
 Expandability Peer to Peer Networking
 Approvals FCC / CE

Physical Characteristics

Body Material LEXAN® Polycarbonate – UV stabilized
 Lens Material LEXAN® Polycarbonate – UV stabilized
 Lens Diameter (mm/inches) 140 / 5½
 Lens Design External optics with interior flute design
 Mounting 6 x 17mm holes on 200mm PCD
 Height (mm/inches) 240 / 9½
 Width (mm/inches) 231 / 9¼
 Mass (kg/lbs) 1.7 / 3¾
 Product Life Expectancy Up to 12 years

Environmental Factors

Humidity 0 to 100%, MIL-STD-810F
 Icing 22kg per square inch
 Wind Speed Up to 160kph
 Shock MIL-STD-202G, Test Condition G, Method 213B
 Vibration MIL-STD-202G, Test Condition B, Method 204

Certifications

CE EN61000-6-3:1997. EN61000-6-1:1997
 Quality Assurance ISO9001:2000
 Waterproof IP68

Intellectual Property

Patents US Pat. No. 6,667,582. AU Pat. No. 778,918
 Trademarks AVLITE® is a registered trademark of Avlite Systems
 Full 3 year warranty

Warranty *

Options Available

- RF Flash Synchronisation (AV72-CS)
- Avlite Pilot Activated Lighting Control
- IR (AV72-IR)
- External ON/OFF Switch (AV72-S)
- External Battery Charging Port
- Manual Operation

• Specifications subject to change or variation without notice

* Subject to standard terms and conditions

† Intensity setting subject to solar availability

