

Radio Controlled Solar Runway or Approach Airfield Light

AV-426-ICAO



AV-426-ICAO Model



Global 2.4GHz RF Radio control

Internal 2.4GHz RF module

LED light unit, with visible and near infrared light outputs

Momentary button to cycle through operational modes

DC input for cable connection (auxiliary charging port system)

External ON/OFF switch

Features

High autonomy, low maintenance

Integrated and replaceable Solar Panels - Enables continuous operation

Optional NVG Mode - Illumination invisible to naked eye to support covert operations

Worldwide 2.4GHz Encrypted RF Radio Control - Secure control of all operational modes from anywhere on the airfield. Worldwide ISM use frequency

AvMesh® integrated Mesh Network - Each light is a receiver/transmitter to expand communication range

Radio Transceiver - Internal to light head, no external antenna

Modes of Operation - Programmable lighting groups, dusk-till-dawn operation, adjustable intensity, sequence flashing

Applications

Runway Edge Light

Runway End Light

Runway Threshold Light

RTIL

Simple Approach Lighting

Compliance

Designed to meet ICAO Annex 14 Volume I, July 2013.

Non precision: Runway Edge, Threshold, End, RTIL, Simple approach

The AV-426 is a robust, completely self-contained LED light designed for a range of aviation applications including permanent approach, runway edge, threshold, helipad and tactical airfield lighting. Fitted with RF radio control, this fully functioning light can be controlled from the tower with no costly cabling or trenching required.

The AV-426 has non-precision IFR and VFR capability with both visible and near infrared lighting outputs. The airfield lights can be controlled anywhere in the airfield by handheld radio controller or in the air traffic control tower with virtually unlimited range using an encrypted repeating mesh network.

The AV-426 wireless RF light has an extended range through the use of the AvMesh® communication protocol. The proprietary AvMesh® protocol enables each light to transmit and receive commands, allowing the airfield to be expanded or altered at any time.

AvMesh® is self-realizing, meaning once deployed the airfield lights will undertake a period of network mapping, whereby the system automatically determines an efficient path to relay command messages through the airfield. Once the system has mapped an efficient relay of command messages, a secondary sub-network is mapped for added redundancy.

Light intensities can be set to Low, Medium or High and are able to be assigned to a 'light group'. Light groups can be controlled independently using the wireless handheld controller. Sequenced approach can also be easily set up via the serial port and controller.

Tested to MIL-STD's for environmental exposure including shock and vibration, extreme temperature and humidity, the unit is designed to offer years of maintenance-free service and operate in some of the world's harshest environments.

The AV-426 is also available without RF radio control.



The AV-SB-10 Solar Booster™ can be connected to the AV-426 light to provide additional solar collection to charge the battery. The Avlite Solar Booster™ can be used in areas of reduced sunlight to help ensure optimum battery charge or where longer periods of high intensity mode is required.

SPECIFICATIONS * *	AV-426 - ICAO	
	Standard	Compact
Light Characteristics		
Light Source	LED	LED
Available colors	Red, Green, White, Yellow, Blue, Bi-directional Combinations, IR	Red, Green, White, Yellow, Blue, Bi-directional Combinations, IR
Photometrics: • Runway Edge, Threshold & End configurations • Uni Approach (steady)	As per: ICAO Annex 14, Vol I, July 2013 650cd	As per: ICAO Annex 14, Vol I, July 2013 650cd
• RTIL, Runway Threshold Identification Light (Peak intensity candela)	700cd	700cd
Available Flash Characteristics	>250 including steady-on (user-adjustable) including Morse Code and RF sequenced & synchronised flashing	>250 including steady-on (user-adjustable) including Morse Code and RF sequenced & synchronised flashing
Intensity Adjustments	ICAO: Low (20%), Medium (40%), High (100%)	ICAO: Low (20%), Medium (40%), High (100%)
LED Life Expectancy (hours)	>100,000	>100,000
Electrical Characteristics		
Circuit Protection	Integrated	Integrated
Operating Voltage (V)	12	12
Temperature Range	-40 to 80°C	-40 to 80°C
Solar Characteristics		
Solar Module Type	Multicrystalline	Multicrystalline
Output (watts)	20	12
Charging Regulation	Microprocessor controlled	Microprocessor controlled
Power Supply		
Battery Type	SLA (Sealed Lead Acid)	SLA (Sealed Lead Acid)
Battery Capacity (Ah)	24	12
Nominal Voltage (V)	12	12
Radio Controlled		
Frequency	2.4GHz ISM Band	2.4GHz ISM Band
Range	Up to 1.4km relayed	Up to 1.4km relayed
Expandability	AvMesh®	AvMesh®
Compliance	FCC / CE	FCC / CE
Physical Characteristics		
Body Material	7-stage powder coated aluminium	7-stage powder coated aluminium
Lens Material	LEXAN® Polycarbonate - UV stabilized	LEXAN® Polycarbonate - UV stabilized
Lens Diameter (mm/inches)	168 / 6 3/4	168 / 6 3/4
Lens Design	Multi-LED optic	Multi-LED optic
Mounting	4 hole 200mm bolt pattern	4 hole 200mm bolt pattern
Height (mm/inches)	503 / 20	406 / 16
Width (mm/inches)	234 / 9 1/5	234 / 9 1/5
Mass (kg/lbs)	14 / 30 7/8	9.1 / 20
Product Life Expectancy	Up to 12 years	Up to 12 years
Environmental Factors		
Humidity	0 to 100%, MIL-STD-810F	0 to 100%, MIL-STD-810F
Icing	3.41kg per square cm / 48.5lbs per square inch	3.41kg per square cm / 48.5lbs per square inch
Wind Speed	Up to 160kph / 100mph	Up to 160kph / 100mph
Shock	MIL-STD-202G, Test Condition G, Method 213B	MIL-STD-202G, Test Condition G, Method 213B
Vibration	MIL-STD-202G, Test Condition B, Method 204	MIL-STD-202G, Test Condition B, Method 204
Certifications		
CE	EN61000-6-3:1997. EN61000-6-1:1997	EN61000-6-3:1997. EN61000-6-1:1997
Quality Assurance	ISO9001:2008	ISO9001:2008
Waterproof	IP68	IP68
Intellectual Property		
Patents	Patents pending	Patents pending
Trademarks	AVLITE® is a registered trademark of Avlite Systems	AVLITE® is a registered trademark of Avlite Systems
Warranty *	3 year warranty	3 year warranty
Options Available	<ul style="list-style-type: none"> • Avlite Pilot Activated Lighting Control • IR LEDs • Solar Booster™ • Without RF Radio Control 	<ul style="list-style-type: none"> • Avlite Pilot Activated Lighting Control • IR LEDs • Solar Booster™ • Without RF Radio Control

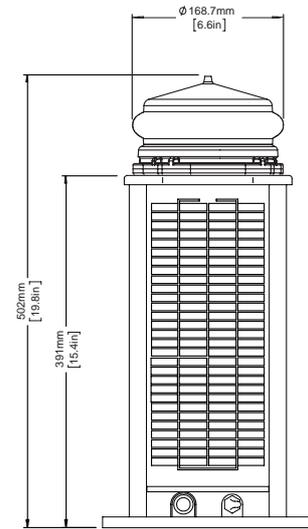
* Specifications subject to change or variation without notice *

Subject to standard terms and conditions

† Intensity setting subject to solar availability



AV-426 Standard Model



AV-426 Compact Model

