# Radio Controlled Authorised Distributor Solar Runway or Approach Airfield Light

AV-426-ICAO



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

## AV-426-ICAO Model

## 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	
REIL	
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 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.

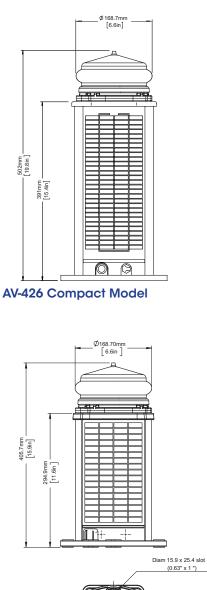




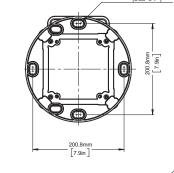
Member of the Frequentis Group

Unit 71.5 Dunsfold Park, Cranleigh, Surrey GU6 8TB, United Kingdom Tel: +44 (0)1483 267 066 Fax: +44 (0)1483 267 044 Email: sales@systemsinterface.com www.systemsinterface.com

	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:	Brailectional Combinations, it	
	Runway Edge, Threshold & End configurations	As per: ICAO Annex 14, Vol I, July 2013	As per: ICAO Annex 14, Vol I, July 2013
	<ul> <li>RTIL, Simple Approach configurations - Peak intensity (candela)</li> </ul>	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
• Sp	Intensity Adjustments	ICAO: Low (20%), Medium (40%), High (100%)	ICAO: Low (20%), Medium (40%), High (100%)
becifi	LED Life Expectancy (hours)	>100,000	>100,000
catic	Electrical Characteristics		
ons si		Integrated	Integrated
ubje	Operating Voltage (V) Temperature Range	12 -40 to 80°C	12 -40 to 80°C
하하	Solar Characteristics	-40 10 80 C	-40 10 80 C
cha	Solar Module Type	Multicrystalline	Multicrystalline
Specifications subject to change or variation without notice	Output (watts)	20	12
or va	Charging Regulation	Microprocessor controlled	Microprocessor controlled
riatic	Power Supply		
on wi	Battery Type	SLA (Sealed Lead Acid)	SLA (Sealed Lead Acid)
thou	Battery Capacity (Ah)	24	12
noti	Nominal Voltage (V)	12	12
e *	Radio Controlled		
	Frequency	2.4GHz ISM Band	2.4GHz ISM Band
	Range	Up to 1.4km relayed	Up to 1.4km relayed
duS	Expandability	AvMesh®	AvMesh®
lectt	Compliance	FCC / CE	FCC / CE
o sta	Physical Characteristics Body Material	Z stage powder coated aluminium	7-stage powder coated aluminium
Subject to standard terms and condition	Lens Material	LEXAN® Polycarbonate - UV stabilized	LEXAN® Polycarbonate - UV stabilized
rms o	Lens Diameter (mm/inches)	168 / 6¾	168 / 6¾
and cor	Lens Design	16 segment, multi-focus lens (Patent pending)	16 segment, multi-focus lens (Patent pending)
ditio	Mounting	4 hole 200mm bolt pattern	4 hole 200mm bolt pattern
ns	Height (mm/inches)	503 / 20	406 / 16
	Width (mm/inches) Mass (kg/lbs)	234 / 9 <sup>1</sup> /5 14 / 30 <sup>7</sup> /8	234 / 9¹/₅   9.1 / 20
+	Product Life Expectancy	Up to 12 years	Up to 12 years
Inten	Environmental Factors		
sity s	Humidity	0 to 100%, MIL-STD-810F	0 to 100%, MIL-STD-810F
etting	lcing	3.41kg per square cm / 48.5lbs	3.41kg per square cm / 48.5lbs
g sub		per square inch	per square inch
oject	Wind Speed Shock	Up to 160kph / 100mph MIL-STD-202G, Test Condition G,	Up to 160kph / 100mph MIL-STD-202G, Test Condition G,
Intensity setting subject to solar availability	Vibration	Mit-312-2029, lest Condition B, Method 213B Mit-STD202G, Test Condition B,	Method 213B MIL-STD202G, Test Condition B,
avai		Method 204	Method 204
lability	Certifications CE	EN61000-6-3:1997.	EN61000-6-3:1997.
CE		EN61000-6-1:1997	EN61000-6-1:1997
$\zeta \zeta$	Quality Assurance Waterproof	ISO9001:2008 IP68	ISO9001:2008 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	Avlite Pilot Activated Lighting Control     IR LEDs     Salar Bactor/M	<ul> <li>Avlite Pilot Activated Lighting Control</li> <li>IR LEDs</li> <li>Salar Baartar M</li> </ul>
		<ul> <li>Solar Booster™</li> <li>Without RF Radio Control</li> </ul>	<ul> <li>Solar Booster™</li> <li>Without RF Radio Control</li> </ul>



AV-426 Standard Model



**systems**interface

Unit 71.5 Dunsfold Park, Cranleigh, Surrey GU6 8TB, United Kingdom Tel: +44 (0)1483 267 066 Fax: +44 (0)1483 267 044 Email: sales@systemsinterface.com www.systemsinterface.com

Member of the Frequentis Group