

AV-70-863

SOLAR TAXIWAY AND BARRICADE LIGHT

The solar-powered AV-70-863 is designed to satisfy the photometric and chromatic requirements of FAA AC 150/534550B, Type L-863, as well as FAA AC150/5345-46E, Type L-861T. Built to require minimal ongoing maintenance, the self-contained unit has two high-performance solar modules to maximize solar collection and provide reliable operation in a range of environmental conditions.

KEY FEATURES

- Intertek certified to L863R and L863B for portable barricade and taxiway lights
- External Switch and External Interface Port (EIP) for charging and programming
- RF Control using AvMesh® RF Network



Easy Installation

Enhance personnel efficiency, eliminate costly trenching, and ensure continuous airfield operations. The AV-70-863 is your solution for dusk-to-dawn illumination with sustained battery performance.

Low Maintenance

The AV-70-863 integrates the latest solar technology including active maximum power point tracking (MPPT) and enhanced LED optics into a compact, self-contained unit requiring minimal maintenance.

Reliable

The rugged design can withstand the harshest environments. Rigorous testing compliant with FAA and MIL standards ensures long-lasting performance.

Trusted

Avlite is an industry leader in solar aviation lighting with thousands of installations worldwide tailored for defense, government, civil, and humanitarian aid operations.

AV-70-863_DATA_EN_V2-1

TECHNICAL SPECIFICATIONS

LIGHT CHARACTERISTICS

LIGHT SOURCE	LED
AVAILABLE COLORS	Blue, Red
HORIZONTAL OUTPUT (DEGREES)	360
INTENSITY ADJUSTMENTS	High: 100% (L-863 certified) Medium: 30% Low: 10%
LED LIFE EXPECTANCY (HOURS)	RED LEDs<90% after 68,900 hours BLUE LEDs<90% after 51,400 hours
MINIMUM PEAK INTENSITY (CD)	As per photometric requirements stated in FAA Advisory Circular 150/5345-50B *Photometrics tested at the HIGH intensity setting

ELECTRICAL CHARACTERISTICS

CIRCUIT PROTECTION	Integrated
TEMPERATURE RANGE	-20°C to +50°C
TRANSPORT AND STORAGE TEMPERATURE RANGE	-20°C to +50°C
CURRENT CONSUMPTION (MA)	High: 32 Medium: 10 Low : 5 Boost: 45

SOLAR CHARACTERISTICS

SOLAR MODULE TYPE	Monocrystalline
OUTPUT (WATTS)	1.4
SOLAR MODULE EFFICIENCY (%)	14
CHARGING REGULATION	Maximum Power Point Tracking (MPPT)
CHARGING CURRENT (MA)	250

POWER SUPPLY

BATTERY TYPE	High grade Nickel Metal Hydride (NiMH)
BATTERY CAPACITY (AH)	B1: 8.6 B2: 17.2
NOMINAL VOLTAGE (V)	3.6
PROGRAMMING/CHARGER	External
EXTERNAL INTERFACE PORT RATED POWER (W)	5
INPUT VOLTAGE (V)	3.6

RADIO CONTROL

FREQUENCY	2.4GHz ISM Band
RANGE	Up to 0.87mi (1.4Km) relayed
EXPANDABILITY	AvMesh (R)
COMPLIANCE	FCC

PHYSICAL CHARACTERISTICS

BODY MATERIAL	UV-stabilized LEXAN® Polycarbonate
BODY COLOR OPTIONS	Aviation Yellow
LENS MATERIAL	UV-stabilized LEXAN® Polycarbonate
LENS DESIGN	Single LED Optic
MOUNTING	6 x 17mm holes on 200mm PCD
HEIGHT (INCHES/MM)	9.41 inches/ 239mm
WIDTH (INCHES/MM)	9.09 inches/ 231 mm
MASS (LBS/KG)	B1: 2.62lb/ 1.187kg B2: 3.45lb/ 1.563kg
SERVICE LIFE	Up to 12 Years (calculated at 12 hours operation per night)

ENVIRONMENTAL STANDARDS

SHOCK	MIL-STD-202G, Test Condition G, Method 213B
VIBRATION	MIL-STD202G, Test Condition B, Method 204
WIND SPEED	Up to 100mph (160kph)
HUMIDITY	0 to 100%, MIL-STD-810F
INGRESS	IP68

COMPLIANCE

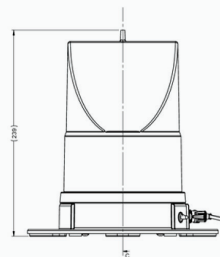
EMC	CFR 47, Chapter 1, Subpart A, Part 15, Subpart B (Class A)
FAA	AC 150/5345-50B (L-863B and L-863R) AC 150/5345-46E (L-861T)
QUALITY ASSURANCE	ISO 9001:2015
TRADEMARKS	AVLITE® is a registered trademark of Avlite Systems, a family brand of SPX Aids to Navigation (a division of SPX Technologies)

OTHER

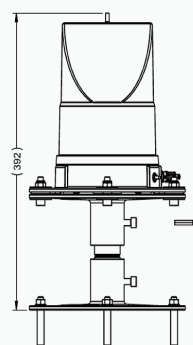
WARRANTY	Please refer to the Warranty Section of the Product Manual
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TECHNICAL DRAWINGS

SIDE



AV-70-863 WITH FRANGIBLE CONCRETE MOUNT (OTHER MOUNTING OPTIONS AVAILABLE)



CONFIGURATION

MODEL	AV-70-863
CERTIFICATIONS	FAA 863B, FAA 863R
LED CONFIGURATION	Omni-directional Blue (Taxiway) Omni-directional Red (Barricade)
BATTERY SIZE	8.6Ah NiMH Battery (B1) 17.2Ah NiMH Battery (B2)
STANDARD FEATURES	Yellow Body, External Switch External Interface Port (EIP)
RF CONTROL	Non-RF 2.4GHz RF Control

ORDERING THIS PRODUCT

AV-70-863-B-B1-03 AV-70 L863 ,Blue LED output, 8.6Ah Battery, External Switch, EIP	AV-70-863-R-B1-03 AV-70 L863 ,Red LED output, 8.6Ah Battery, External Switch, EIP
AV-70-863-B-B2-03 AV-70 L863 ,Blue LED output, 17.2Ah Battery, External Switch, EIP	AV-70-863-R-B2-03 AV-70 L863 ,Red LED output, 17.2Ah Battery, External Switch, EIP
AV-70-863-B-B2-07 AV-70 L863 ,Blue LED output, 17.2Ah Battery, RF Control, External Switch, EIP	AV-70-863-R-B2-07 AV-70 L863 ,Red LED output, 17.2Ah Battery, RF Control, External Switch, EIP