

# AVIALITE®

LED LIGHTING INNOVATION ✈

Compact - Lightweight - Robust - Reliable

RED LED

ICAO Medium Intensity Type B



## MS-2KP Series



lead-free



ICAO Medium Intensity  
ICAO Type B



2000cd  
Aviation Red



Battery  
Powered



Solar  
Energy



IP55  
Protection



Solid  
State Tech



Sensor  
Photo Sensor



25F  
Flashing/Alt



GPS Sync  
Multi Lamp Sync



Lightning  
Rod



Alarm  
Alarm Relay



Battery Fuse  
Protection



Tool Free  
System

### DESCRIPTION

AVIALITE MS-2KP Series is a Solar powered flashing Medium Intensity LED obstruction beacon.

MS-2KP fulfills ICAO Medium Intensity Type B and FAA L-864 requirements:

- Effective luminous Intensity: 2,000 cd
- Optional Wireless GPS Synchronisation across 2 or more lamps over an unlimited distance apart

### APPLICATIONS

- :: Tall Buildings
- :: Wind Turbines, Bridges
- :: Cranes, Pylons and Chimneys
- :: Power Transmission Towers
- :: Telecommunication Towers and all structures that require Medium Intensity Obstruction lights especially tall structures in the aviation traffic corridors above 45-150m high

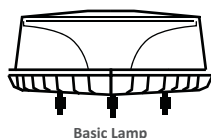


### FEATURES

- :: Ultra High brightness CREE LED light source
- :: Expected LED life span of >100,000 hours under normal operating conditions
- :: Weather proof Lamp (IP67), corrosion & chemical resistant
- :: Compact, light weight, highly resistant to shocks & vibrations
- :: Crystal clear PMMA automotive grade lens, resist UV & yellowing
- :: Excellent heat dissipation for optimum LED performance
- :: Excellent 1 to 1 product swap policy (Terms & Condition apply)
- :: Built tough for long service life

### PRODUCT BENEFITS

- :: Install with ease on site with minimum tools and manpower
- :: Virtually maintenance free operation and design
- :: Low wind drag and unobtrusive
- :: Ultra low operation cost, quick ROI



Basic Lamp

Features built into the system



S = Solar Sensor



F = Flashing Type

Optional



A = Alarm Type



GPS = GPS



Lightning Rod

## OPTICAL CHARACTERISTICS

ICAO Type	(Flashing) ICAO Medium Intensity Type B
Colour	LED Source 44 LED cluster Red color
Effective Luminous Intensity	2,000 Candela (cd)
Vertical Beam Spread	>3°
Horizontal Beam Spread	360° omni-directional

## POWER

<b>Solar Panel</b>	20W Polycrystalline silicon photovoltaic cells
Peak Power	20 watts peak
Max Power current	1.34A
Max Power Voltage	33.6V
Dimensions	330x460x25mm
Weight	2kg
<b>Battery Powered</b>	Built in solid state battery charger
Rated Voltage	24V system (2x 12V)
Rated Capacity	12AH maintenance Free sealed Lead Acid Battery
Special Features	Automatic Battery low voltage disconnect
Autonomy	5 Days
Dimensions	2x (151x98x94mm)
Weight	8kg (2x 4kg)

Protection Fuse	Provides added protection against accidental battery short-circuit which could result in damage to battery or lamp
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Tool Free System	Change battery without tools Faster and convenient
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Lightning Arrestor	Lightning Rod that serves as a lightning arrestor (optional item)
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## OPERATING CONDITIONS

Temperature	-20°C to +60°C
Ingress Protection	IP67 (Lamp) IP55 (Casing ; Solar + Battery)
Vibration Resistance	Resistant to shock and vibration

Alarm Relay Conditions	For remote monitoring of: A. Power supply failure B. Lamp failure
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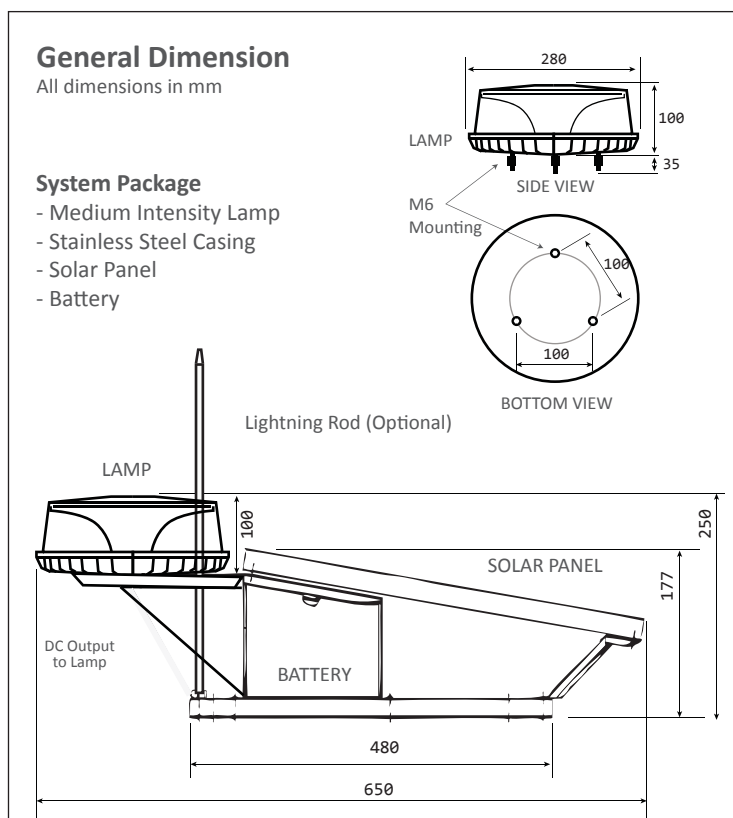
Lamp Failure Alarm Output	1. NO (Normally Open) 2. Com (Common) 3. NC (Normally Closed)
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## DIMENSIONS & WEIGHT

<b>LAMP</b>	
Height	100mm (including mounting bolt)
Diameter	280mm
Weight	2kg
<b>Housing</b>	
Solar + Casing Dimension	650x330x250mm
Casing Material	Galvanised + Powder Coated
Weight	Solar (2kg) + Battery (8kg) +Casing (2kg)
Total Weight (System)	Approx 14kg

## SPECIFICATION

<b>Sensor</b>	Solar panel, auto ON/OFF of lamp
Light sensor sensitivity	Ambient light < 50 Lux (±10%) = Lamp 'ON' > 50 Lux (±10%) = Lamp 'OFF'
Flashing Rate	25 fpm (flash per minute)
GPS Sync Flashing (Optional)	Supports multi lamp flashing using GPS synchronization (Wireless)



Model	ICAO Medium Intensity	DC Voltage (±10%)	Effective Brightness	Description
MS-2KP	Type B (Flashing)	24 V Battery	2,000 cd	Basic Lamp
MS-2KP-R	Type B (Flashing)	24 V Battery	2,000 cd	+ ALARM
MS-2KP-GPS	Type B (Flashing)	24 V Battery	2,000 cd	+GPS Sync to other GPS lamps



DEPARTMENT OF CIVIL AVIATION  
MALAYSIA

# OBSTACLE LIGHTS CERTIFICATE

**ASD404/CERT/016/2017**

**AVIALITE SDN BHD**  
NAME OF PRODUCT DISTRIBUTOR

This Certificate is issued pursuant Airport Standards Directive 404 [ASD404], published under the provision of Section 24o of Civil Aviation Act 1969 [Act 3]. to certify that the obstacle lights offered by Distributor **AVIALITE SDN BHD** has complied with the requirements of Airport Standards Directive 404 and Annex 14 Vol. I to the Convention on International Civil Aviation pertaining to obstacle lights of the following Type Code[s] –

- i. DCA/L/A Model no.
- ii. DCA/L/B Model no.
- iii. DCA/M/A Model no.
- iv. **DCA/M/B Model no. MS – 2KP Series**
- v. DCA/H/A Model no.
- vi. DCA/H/B Model no.

The Authority may suspend, revoke or vary this Certificate at any time if the above listed obstacle lights fails to comply with the requirements of Airport Standards Directive 404 and Annex 14 Vol. I.

This Certificate shall remain in effect from the date of issue until **31 December 2018**.

.....  
DIRECTOR OF AIRPORT STANDARDS  
DEPARTMENT OF CIVIL AVIATION MALAYSIA

**21 November 2016**  
DATE OF ISSUE



**SIRIM QAS International Sdn.Bhd.** (410334-X)  
No.1, Persiaran Dato' Menteri, Section 2, P.O.BOX 7035,  
40700 Shah Alam, Selangor Darul Ehsan, Malaysia.  
Tel: 03-55446252  
Fax: 03-55446272  
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### TEST REPORT

REPORT NO.: 2014EEB0659

PAGE : 1 OF 11

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Managing Director, SIRIM QAS International Sdn. Bhd. Please refer the last page for Conditions Relating to the Use of Test Report.

Applicant : **AVIALITE SDN. BHD.**  
21, Jalan PBS 14/3, Taman Perindustrian Bukit Serdang,  
43300 Seri Kembangan, Selangor Darul Ehsan, MALAYSIA.

Manufacturer : **AVIALITE SDN. BHD.**  
21, Jalan PBS 14/3, Taman Perindustrian Bukit Serdang,  
43300 Seri Kembangan, Selangor Darul Ehsan, MALAYSIA.

Product : **MEDIUM INTENSITY SOLAR POWERED AVIATION OBSTRUCTION LIGHT**

Reference Standard / Method of test : **IES LM 79-08**  
(Electrical and Photometric Measurement of Solid-State Lighting Product)

Description of Sample : Brand Name : **AVIALITE**  
Model / Type : **MS-2KP**  
Rating : Voltage : 24 V  
Current : 2.0 A  
Effective Luminous Intensity : 2000 cd (Candela)

Date Received of Complete Application : 10 SEPTEMBER 2014

Job No. : J20142120657

Overall Test Result : (See Page 3 for details)

Issued Date : 13 OCTOBER 2014

Approved Signatory,

(MOHD FIRDAUS MOHD YASIN)  
Testing Executive



(MOHD AZMEER AHMAD)  
Group Leader  
Electrical and Electronics 2 Section  
Testing Services Department