# **Solar LED Airfield Light**

A704

#### **SOLAR LIGHTS - 7.2**

#### **FEATURES**

#### Advanced Design:

- Improved optical efficiency with latest LEDs
- Up to 25% more power with high-efficiency solar panels
- Reduced standby power consumption
- Multiple solar engine sizes for best value-for-performance

• Easy Installation: Limited crew, no trenching, no airfield interruptions. Just place the A704 and it emits light dusk-todawn while maintaining its battery. Optional wireless control provides on-demand operation from up to 4 km (2.5 m) away.

• Low Maintenance: The A704 integrates solar panels, battery, electronics, and LED light source into a compact, stand-alone unit requiring minimal maintenance. The replaceable battery extends service life well beyond 5 years.

• **Reliable**: The Energy Management System (EMS) monitors all operations to provide consistent output in the harshest environments. Testing to ICAO, FAA and MIL specifications ensures high performance for many years.

• **Trusted**: With thousands of installations worldwide, solar LED lights operate year-round at permanent airfields and temporary military installations.



# COMPLIANCES

- · ICAO and FAA compliant
- · Omni and bi-directional options
- Third party tested
- · Proven technology platform
- Available in three solar engine sizes.

#### **PRODUCT APPLICATION**

Medium-intensity runway edge & threshold (MIRL) High-intensity runway edge & threshold (HIRL) Taxiway Lighting NVG operations Emergency airfields Helipads



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#### **GENESIS LAMP**

375 North St. Clair St. Painesville, OH 44077



# **SPECIFICATIONS**

Optical	High-power LEDs meet IES LM-80 lumen maintenance, ensuring consistent photometrics for life of product				
	ICAO, SAE25050 (FAA), and FAA EB 67 compliant chromaticity				
	NVG-compatible infrared (IR) LEDs				
	Steady-on and flash				
Energy Collection	High-efficiency cells with blocking diodes				
	Maximum power point tracking with temperature compensation (MPPT-TC) for optimal energy collection in all solar conditions				
Energy Storage	<ul> <li>Pure-lead VRLA AGM battery with manufacturer operating range -65 to 80 °C (-85 to 176 °F)</li> <li>On-board battery status</li> </ul>				
	Designed for 5+ year battery life; Replaceable and recyclable				
	Optional port for battery charging and cabled operation				
Energy Management System (EMS)	Intelligent, microprocessor EMS				
(=====)	On-board diagnostics and data logger				
	Push button interface for local control				
	Autonomous, Temporary, and Emergency Modes				
Automatic Light Control (ALC)	ALC adjusts output intensity in response to unusually low amounts of sunlight to ensure continued operation				
Construction	Premium, UV-resistant polycarbonate lens				
	Powder-coated aluminum and polycarbonate chassis with integrated handle				
	Waterproof, vented battery compartment				
Temperature	<ul> <li>-30 to 50 °C (-22 to 122 °F) Optimal</li> </ul>				
	• -40 to 80 °C (-40 to 176 °F) Maximum				
Wind & Ice Loading	644 km/h (400 MPH) wind; 0.03 psi (22 kg/m2) ice				
Shock & Vibration	MIL-STD-202G and MIL-STD-810G				
Ingress	EN 60529 IP 67 immersion				
	MIL-STD-202G immersion & damp heat cycling				
	MIL-STD-810G rain & salt fog				
Compliance	CE compliant (non-wireless model only)				



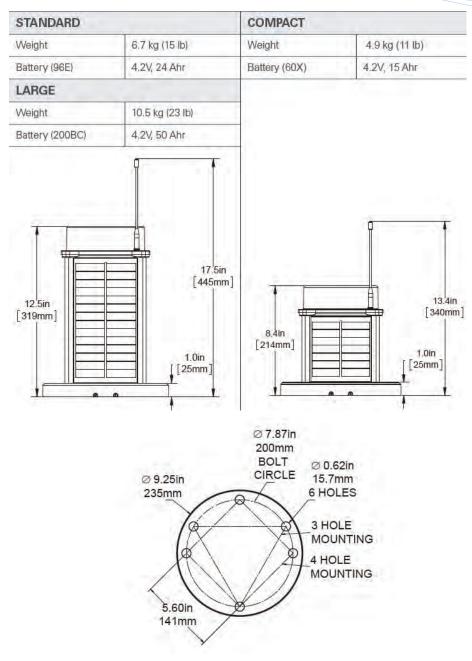
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SOLAR LIGHTS - 7.2 Solar LED Airfield Light A704

# DIMENSIONS AND WEIGHTS



#### **CONFIGURATION**

MODEL	OUTPUT	SOLAR ENGINE	CHASSIS	CONTROL	CHARGE PORT
A650	WHITE / IR WHITE / YELLOW / IR RED / GREEN / IR BLUE / IR GREEN / IR YELLOW / IR RED / IR	COMPACT STANDARD LARGE	YELLOW OLIVE DRAB	NON-WIRELESS WIRELESS	NONE CHARGE PORT MILITARY CHARGE PORT



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**SOLAR LIGHTS - 7.2** LED Solar Airfield Light A704

### THIRD PARTY VALIDATION: PHOTOMETRIC COMPLIANCE

Refer to table below for additional details

<sup>1</sup> ICAO MIRL (Annex 14, Vol.1, 5.3.9.9) FAA L-861 MIRL (AC 150/5345-46, EB67) FAA L-862 HIRL (AC 150/5345-46, EB67), step 3 of 5 Transport Canada MIRL (TP-312, 5.3.10.13)

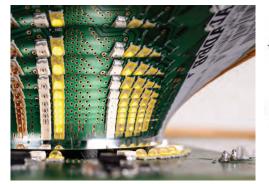
<sup>2</sup> FAA L-861E & L-861SE MIRL (AC 150/5345-46, EB67) FAA L-862E HIRL (AC 150/5345-46, EB67), step 3 of 5

# **PEAK INTENSITY**

<sup>3</sup> ICAO Type A (Annex 14, Vol. 1, 6-3) ICAO Type B (Annex 14, Vol. 1, 6-3) FAA L-810 (AC 150/5345-43, EB67)

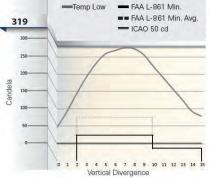
<sup>4</sup> FAA L-810 vertical divergence; 850 - 890 nm peak

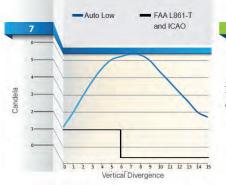
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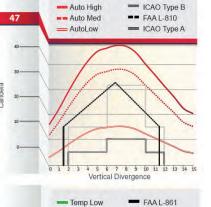


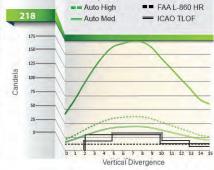
A704 Lens Design











A704 Standard/Large & Compact Models

Specifications subject to local environmental conditions.

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# ACCESSORIES

The A704 Series Airfield Lights come with a range of accessories including durable mounting hardware, frangible couplings and a selection of replacement parts.

#### **MOUNTING HARDWARE**

REF.	PART NO.	DESCRIPTION
1	64559	16 x 16" rubber mat and hardware
2A	71757	Standard bolt kit, 700 series (4x stainless steel bolts)
2B	71884	Security bolt kit, 700 series (2x bolts, not including keys)
-	53288	Security bolt kit, bolt key/driver bit
-	53289	Security bolt kit, nut key/driver bit
ЗA	65714	Standard mounting plate (18" installed height)
3B	65717	Extended mounting plate (26" installed height)
-	74239	Helipad mounting bracket
4	65711	Frangible coupling, 1.5" pipe x 2 thread
5	50144	Floor flange, 2" thread
6	46397	Anchor bolt kit
7A	38925	2" hub stake - 15" long
7B	38964	2" hub stake - 30" long
-	Inquire	Grass guard kit

### **BATTERY/CHARGER**

REF.	PART NO.	DESCRIPTION
-	72890	Battery kit, A704 Compact
-	72891	Battery kit, A704 Standard
-	72892	Battery kit, A704 Large
-	74314	Battery charger, A704 with military charge port, 100-240 VAC, 50/60 Hz
-	69885	Battery charger, A704 battery pack and barrel charge port, 100-240 VAC, 50/60 Hz

# **OPTICS**

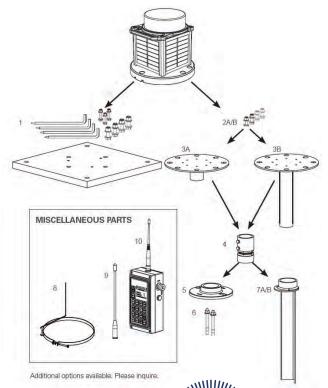
REF.	PART NO.	DESCRIPTION
-	74690	Optical shield, 180 degree, several models
-	Inquire	Head kit, several models

### **MISCELLANEOUS PARTS**

REF.	PART NO.	DESCRIPTION
8	40865	A704 series bird deterrent
9	56150	Replacement antenna
10	48473	Handheld Controller
-	48984	Installation tool kit with 5/32" security bit for head/battery changes and small socket set



A704 SERIES MOUNTING HARDWARE OPTIONS





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