



# ALS

SOLAR APPROACH LIGHTING SYSTEM

Carmanah's flexible, solar-powered Approach Lighting System (ALS) provides visual information on runway alignment, height perception, roll guidance and horizontal references:

- FAA, ICAO and UFC photometric compliant
- Ideal for permanent, temporary, emergency and military airfields
- Easy to install, configure and maintain

When landing aircraft, an ALS is critical during the transition from instrument flight (IFR) to visual flight (VFR). Our ALS features:

- Advanced LED optics with no high voltage cables or bulb changes
- Designed for portable or fixed applications
- Visible and optional Infrared (IR) operating modes
- Optional wireless control provides on-demand operation from up to 4 km (2.5 m) away
- Optional control tower integration and ARCAL
- Solar, AC or battery powered options

Our ALS is compliant with international standards for approach lighting systems and accommodates a wide variety of layouts including:

- ICAO Simple ALS
- FAA Medium Intensity Approach Lighting (MALSR)



SEQUENCED FLASHING LIGHT (SFL)



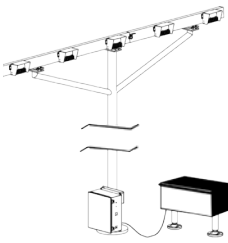
STEADY-BURNING LIGHT (SBL)



STEADY-BURNING LIGHT (SBL) BARRETTE

REPRESENTED IN YOUR REGION BY:





STEADY-BURNING LIGHT BARRETTE



SOLAR ENGINE



OPTIONAL HANDHELD CONTROLLER

- 4 km (2.5 m) control range
- 900 MHz with encrypted signal
- Control 8 groups of lights independently

# ALS

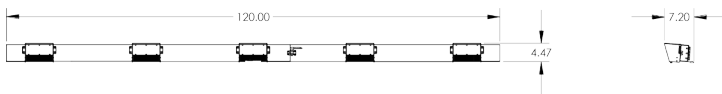
## SOLAR APPROACH LIGHTING SYSTEM

### SPECIFICATIONS

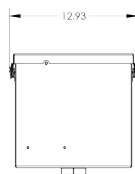
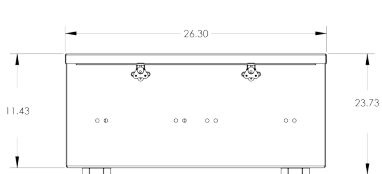
Optical	High-power LEDs with efficient heat management ensure consistent photometrics for life of product. Steady-Burning Light (SBL): +10,000 cd Sequenced Flashing Light (SFL): +100,000 cd with 5.5 ms flash	
	NVG-compatible infrared (IR) LEDs	
	FAA MALSR compliant, FAA-E-2980	
	ICAO Annex 14 compliant	
	UFC 3-535-01 MALSR compliant	
Power Options	Solar kit:	Solar panels and mounting, batteries and enclosures; AC input for backup
	Generator kit:	Gas or diesel generator; AC input for backup
	Battery kit:	Batteries & enclosures; AC input for backup
	AC only:	100 - 240 VAC 50/60 Hz; 3 and 5-step current input
Control Options	Non-Wireless:	Multi step current control
	Wireless:	4 km (2.5 m) control range with optional Handheld Controller; local control
Construction	Powder coated aluminum chassis	
	Aviation orange standard, yellow and other colors available	
	Stainless steel and anodized aluminum hardware	
Temperature	-31- to 131 °F (-35 to 55 °C)	
Wind Loading	300 mph (134 m/s)	
Ingress (Battery Box)	NEMA 4 & EN 60529 IP 55	

### DIMENSIONS

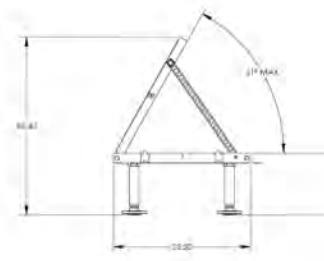
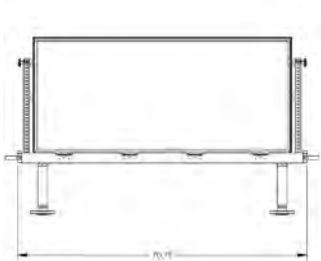
#### STEADY BURNING BARRETTE



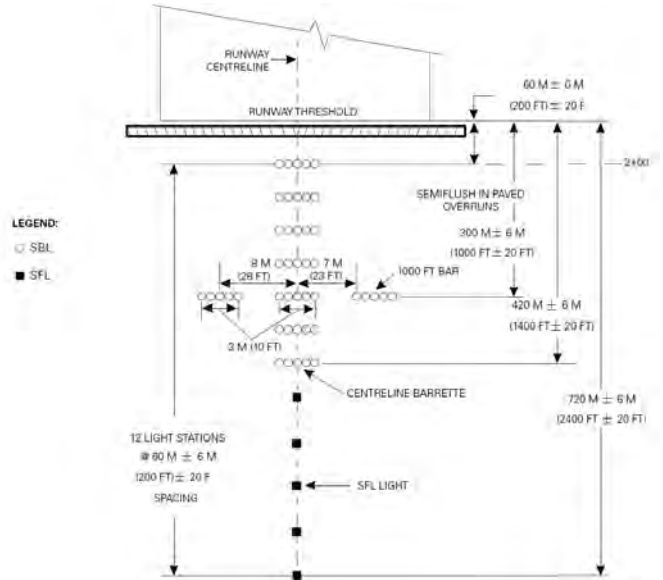
#### BATTERY BOX



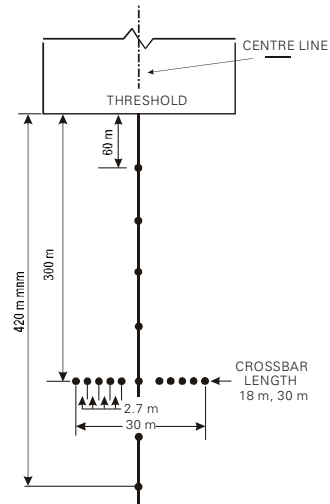
#### SOLAR SYSTEM



### FAA MALSR SYSTEM



### ICAO SIMPLE APPROACH LIGHTING SYSTEM



### CONFIGURATION

MODEL	LAYOUT TYPE ▼	MOUNTING ▼	OUTPUT ▼	POWER ▼	CONTROL ▼
ALS	FAA MALSR UFC MALSR ICAO SIMPLE CUSTOM	PERMANENT PORTABLE	VISIBLE VISIBLE / IR	SOLAR KIT GENERATOR KIT BATTERY KIT AC	NON-WIRELESS WIRELESS



Specifications subject to local environmental conditions.  
 Specifications may be subject to change.

US and International patents apply. Other patents pending.  
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The management system governing the manufacture of this product is ISO 9001:2008 certified.  
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