

# SOLAR LIGHTING

## A650

### A650 Solar Airfield Light



Non-Wireless

Wireless

### Description

Meets traditional airfield requirements for taxiways and general purpose marking.

- ICAO and FAA compliant
- Greater than 10 cd of intensity
- Dusk-to-dawn or on-demand operation
- NVG compatible IR LEDs available

### Uses

- Taxiway and apron edge
- Construction, barricades and fences
- Temporary or permanent markings
- Helipads
- Hazard marking

### Features

- Compliant Output: FAA L-861T and ICAO Annex 14. The A650 Wireless Blue is compliant with the requirements of ICAO Annex 14, Volume 1, Sixth Edition (2013).
- Easy installation and relocation: No specialized work crew required. Lights are immediately operational with limited air traffic disruption. The A650 can be quickly relocated for temporary or emergency applications.
- Self-contained and low maintenance: All components are incorporated within a compact, stand-alone unit. The A650 features a replaceable battery pack that extends the service life beyond five years, reducing the total cost of ownership and resulting in significant cost savings.
- Unprecedented reliability: Energy Management System (EMS) monitors and adapts the brightness to environmental conditions for consistent operation and long life under the toughest conditions.

- Designed and tested to toughest industrial standards: MIL-STD-202G: Humidity, Immersion, Vibration, Shock; MIL-STD-810G: Solar radiation, Salt Fog; EN 60945: ESD, EMI, EMC; IP68; L70. The A650 is acceptable for barricade and construction applications at Commercial Part 139 Airports under FAA Advisory Circular AC 150/5370-2E.
- User friendly: Easy configuration and programming options including: on-board user interface, infrared remote and device manager software through USB connection or optional wireless control system offering secure 900 MHz.
- Made in the Canada by Carmanah Technologies Corp., Victoria, BC.

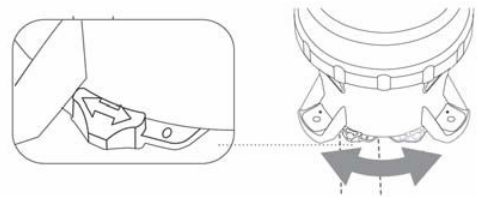
### Configuration

Model	Output	Switch	Control
A650	Red Green White Yellow Blue	<ul style="list-style-type: none"><li>• Non-Switched</li><li>• Switched <sup>1</sup></li></ul>	<ul style="list-style-type: none"><li>• Non-Wireless</li><li>• Wireless <sup>1</sup></li></ul>

#### Notes

<sup>1</sup> A650 Wireless version must have switch.

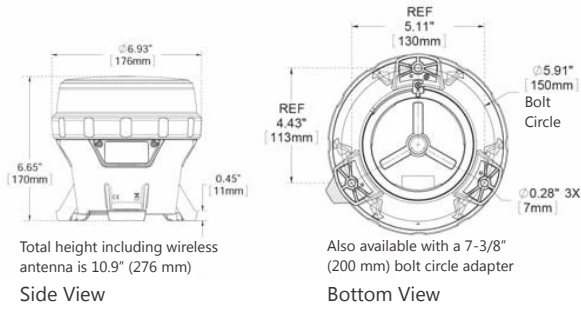
### Switched View



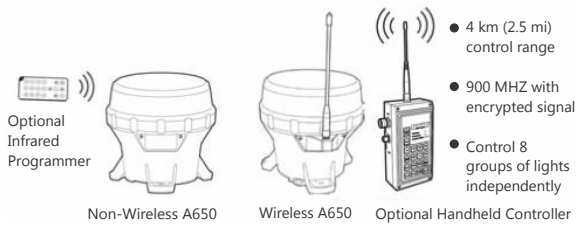
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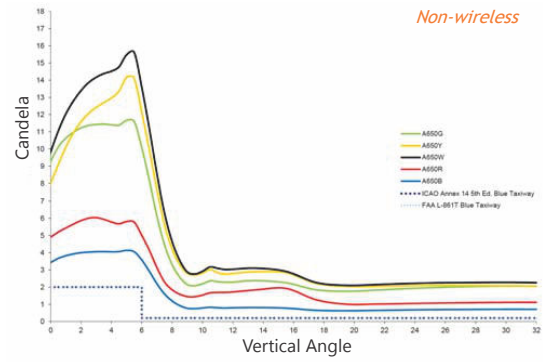
### Dimensions



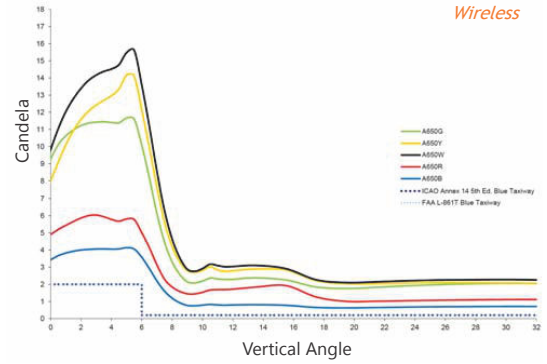
### Options



### Photometric Data



NOTE: Intensity dependent on location.  
 Based on equatorial location of 12-hour night duration and steady-on (001) flash code.



## Equipment Data

Solar Panel	High-efficiency cells with bypass and blocking diode function. Maximum power point tracking (AAPPT) for optimal energy collection.
Battery	Tool-less replaceable and recyclable best-in-class battery pack with extreme temperature range. Battery status feedback of Good, Charge or Bad (Replace).
Light Source	High power LED. Color-specific temperature corrected LED drivers provide consistent intensity under all operating conditions.
Intensity	Greater than 10 cd intensity, steady-on (see photometric plot).
Flash Patterns	256+ (non-wireless) Steady-on mode and flash patterns (wireless)
Construction	Premium grade UV-resistant, polycarbonate/polysiloxane co-polymer body and lens material. Double O-ring sealing with waterproof vent.
Colors	Blue, Red, Yellow, Green and White. ICAO and SAE25050 (FAA) compliant chromaticity. NVG-compatible infrared (IR) LEDs (wireless only).
Operating Temperature	-45 °F to +124 °F (-43 °C to +51 °C) ambient temperature The A650 will function up to +190 °F (+88 °C) internal and surface temperatures.
Storage Temperature	-45 °F to +176 °F (-43 °C to +80 °C)
Color Indicator	Yes, FAA Engineering Brief No. 67 compliant.
Weight	3.5 lb (1.6 kg)
Wind Loading	400 mph (644 kph)
Automatic Light Control (ALC)	When enabled, ALC will dynamically reduce brightness in response to unusually low amounts of sunlight to ensure continued operation.
<b>Wireless</b>	
Range	Up to 2.5 miles (4 km)
Frequency	900 MHz ISM