



# EVHC Series

## High Lumen LED Emergency Light

### FEATURES

#### Application

The EVHC series is a high lumen output emergency lighting unit designed for high mounting height applications. The EVHC Series has a flame-rated, UV stable thermoplastic housing and a lightly textured white or black finish. Integral LED based lamp-heads are fully adjustable. Unit provides a full 90 minutes of emergency lighting. Includes micro-controller based 3-stage charger and Lithium Iron Phosphate(LiFePO) battery. The EVHC accepts 120 through 277VAC input at 50 or 60Hz. The "BC" option includes an easy access battery compartment for ease of battery replacement. Not designed for self-diagnostic operation at 220-240VAC input.

#### Construction

The EVHC series housing and back-plate are made from durable injection molded ABS thermoplastic. Lamp-head front halves are made of die-cast aluminum for thermal dissipation. Back half of lamp-head made of glass filled thermo-plastic. LED lens are made of poly-carbonate. The "BC" option includes a molded battery compartment and access door. Battery position maintained by a velcro strap.

#### Installation

Universal mounting template molded in the back plate aids in quick installation. Unit mounts to all single gang and standard 3 1/2" and 4" square or octagonal electrical boxes. Conduit entry through a molded-in knock-out at the top center and at the upper half of each side. Pre-stripped AC input leads provided. Unit may be ceiling or wall mounted.

#### Illumination

The EVHC series provides bright and uniform illumination and is specifically designed for higher mounting heights above 9'. Coverage provided by 2 integrally mounted lamp-heads using 3 high power LEDs each. The LEDs are located in a specially designed heat dissipating lamp-head which is fully adjustable. The EVHC photometrics are available for download at [www.dual-lite.com](http://www.dual-lite.com). The EVHC6 offers 326 lumens and the EVHC12-06L option provides 546 lumens. Both photometric files are available on [www.dual-lite.com](http://www.dual-lite.com)

#### Compliances

Listed to UL924 Standard, NFPA 101, NFPA 70  
Damp Location Listed

#### Warranty

LED Lifetime Warranty  
EVHC Standard Model- 3 Year Full  
EVHC Spectron Model- 5 Year Full

|                |      |
|----------------|------|
| Catalog Number |      |
| Comments       | Type |



Battery Compartment Option (Patents Pending)



### ACCESSORIES

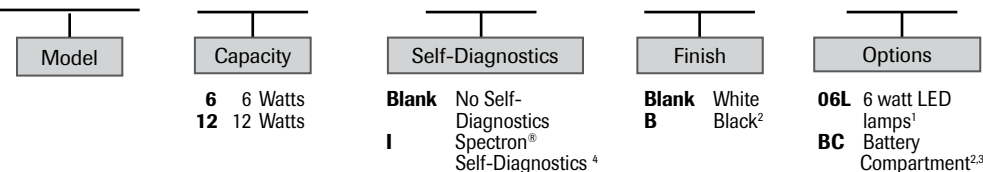
- EVHCR2** Double Remote
- WGA3** Wire Guard - 10"H x 14"L x 6"D



**NOTE:** The EVHC12 with remote capacity will only power the EVHCR2 shown above. The EVHC12 is not designed to run any other remote.

### ORDERING GUIDE

#### EVHC



<sup>1</sup> Only available on EVHC with 12 watt capacity

<sup>2</sup> BC option only available in White Finish

<sup>3</sup> BC option only available with EVHC6, EVHC6L, EVHC12 or EVHC12L  
not available with EVHC12-06L or EVHC12L-06L

<sup>4</sup> Not for use with 220-240VAC input



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### SPECIFICATIONS

#### Additional Ordering Information

|                    | Battery             | Capacity | Lamp(w) | Lumens per Lamp | Remote Watts | Run-Time | Extended Runtime | Remote Capable | Remote Part Number |
|--------------------|---------------------|----------|---------|-----------------|--------------|----------|------------------|----------------|--------------------|
| <b>EVHC6</b>       | LiFePO <sub>4</sub> | 6 watts  | 3 watts | 326             | 0            | 90 min   | No               | No             | N/A                |
| <b>EVHC6I</b>      | LiFePO <sub>4</sub> | 6 watts  | 3 watts | 326             | 0            | 90 min   | No               | No             | N/A                |
| <b>EVHC12</b>      | LiFePO <sub>4</sub> | 12 watts | 3 watts | 326             | 6            | 90 min   | Yes              | Yes            | EVHCR2             |
| <b>EVHC12I</b>     | LiFePO <sub>4</sub> | 12 watts | 3 watts | 326             | 6            | 90 min   | Yes              | Yes            | EVHCR2             |
| <b>EVHC12-06L</b>  | LiFePO <sub>4</sub> | 12 watts | 6 watts | 546             | 0            | 90 min   | No               | No             | N/A                |
| <b>EVHC12I-06L</b> | LiFePO <sub>4</sub> | 12 watts | 6 watts | 546             | 0            | 90 min   | No               | No             | N/A                |

#### Electronics

Upon failure of the normal utility power, a solid-state transfer switch automatically activates the emergency LED lamp-heads. Upon resumption of normal utility power, the battery is disconnected from the load and recharged through a micro-controller based 3-stage charger. The battery is a maintenance-free Lithium Iron Phosphate (LiFePO<sub>4</sub>) type. The EVHC series accepts 120 through 277VAC at 50 or 60 Hz. A low voltage battery disconnect (LVD) feature protects the battery from severe damage during prolonged power failures. Manual testing is available at any time using the push-to-test button.

The EVHCR2 can be mounted up to 53' using 18 gage wire.

**Number of Lamps:** 2 lamp-heads with 3 high-power LEDs per head

**Lamp Color:** Cool White, 5000K

**Total Lamp Output:** Standard Model, 326 lumens per lamp-head  
Optional 6W Lamps, 546 lumens per lamp-head

**Rated LED lifecycle:** greater than 100,000 hrs.

#### Standard Features Include:

- Intelligent 2-wire input
- External push-to-test switch and AC-on indicator
- Battery re-charge within 24 hours
- AC Lock-out circuit
- Low voltage battery disconnect
- Conduit entry knock-out located at the top center and upper half of each side
- Micro-controller based 3-stage charger
- Flashing trouble code for "Battery Disconnect" or "Charger Fault"

#### Optional Features:

- Self-diagnostics monitors LED status, LED driver circuit, battery capacity and charger function and displays any fault detection by means of a flashing code
- Self-Test feature automatically runs a 1 minute test once a month and an alternating 30 or 60 minute test once every 6 months. Multi-color LED indicator provides visible fault detection and charging status
- User initiated 1, or 90-minute system test feature
- 15 minute re-transfer delay
- Automatic unit transfer in brown-out conditions (below 80% of nominal AC input voltage)
- "BC" option allows for easy battery replacement with no access to high voltage components. Includes polarity sensitive connector.

#### Operating Temperature Range:

Damp Listed: 50° to 104°F (10° to 40°C)

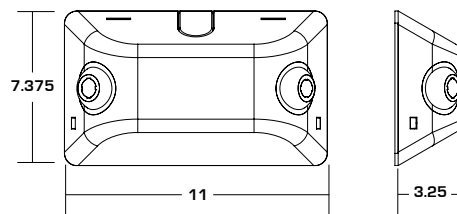
#### Input Power Consumption

|                | Input Volts | Amps. | Max. Watts |
|----------------|-------------|-------|------------|
| <b>EVHC6</b>   | 120         | 0.028 | 2.3        |
|                | 277         | 0.028 | 2.2        |
| <b>EVHC6I</b>  | 120         | 0.023 | 2.3        |
|                | 277         | 0.028 | 2.2        |
| <b>EVHC12</b>  | 120         | 0.040 | 3.7        |
|                | 277         | 0.040 | 4.0        |
| <b>EVHC12I</b> | 120         | 0.035 | 3.7        |
|                | 277         | 0.040 | 4.0        |

#### Maintenance Mode Power Consumption - 120 VAC - 0.32W; 277 VAC - 0.36W

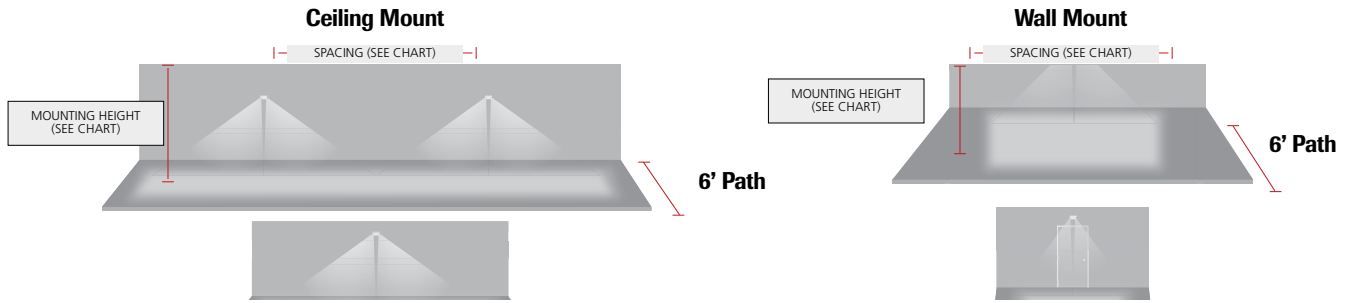
The EVHC Series meets proposed California Energy Commission (CEC) requirements for limits on power consumption in maintenance mode with less than 0.5 watts.

### DIMENSIONS





## APPLICATION INFORMATION



\* Multiple unit spacing based on 6' path

| EVHC                   | Ceiling Mount      |     |     |     |     | Wall Mount       |      |
|------------------------|--------------------|-----|-----|-----|-----|------------------|------|
|                        | CH=30', R=10/10/10 |     |     |     |     | CH=9' R=80/50/20 |      |
| Mounting Height        | 20'                | 18' | 16' | 14' | 12' | 10'              | 7.5' |
| Max Spacing @ 1 FC Avg | 40'                | 42' | 44' | 47' | 49' | 51'              | 57'  |
| Max Spacing @ 1 FC Min | 26'                | 25' | 24' | 23' | 22' | 20'              | 23'  |

| EVHC - 06L             | Ceiling Mount      |     |     |     |     | Wall Mount       |      |
|------------------------|--------------------|-----|-----|-----|-----|------------------|------|
|                        | CH=30', R=10/10/10 |     |     |     |     | CH=9' R=80/50/20 |      |
| Mounting Height        | 20'                | 18' | 16' | 14' | 12' | 10'              | 7.5' |
| Max Spacing @ 1 FC Avg | 62'                | 65' | 67' | 70' | 72' | 75'              | 83'  |
| Max Spacing @ 1 FC Min | 35'                | 33' | 32' | 31' | 29' | 27'              | 34'  |

Meets Life Safety Code minimum illuminance of 0.1 fc and average illuminance of 1.0 fc. Assumes open space with no obstructions, wall mounting height shown in above table, ceiling mounting height shown in above table and reflectances of 80/50/20. Photometry files available on the Dual-Lite web site ([www.dual-lite.com](http://www.dual-lite.com)).