



EVC Series

Architectural LED Combination Exit/Emergency Light

Catalog Number	
Comments	Type

FEATURES

Application

The EVC Series is a compact architectural LED combination exit and emergency light designed for fast installation and reliable service. The EVC Series has a flame-rated, UV stable thermoplastic housing with a lightly textured white or black finish. Integral LED based lamp-heads are fully adjustable. Unit provides a full 90 minutes of exit and emergency lighting. Includes micro-controller based 3 stage constant current/constant voltage charger, and a long-life lithium iron phosphate (LiFePO₄) battery. The EVC accepts 120/277VAC input at 50 or 60Hz and optional 220-240VAC input at 50 or 60 Hz with self-diagnostics option.

Construction

The EVC Series housing and canopy 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 ABS thermo-plastic. LED lens are made of acrylic.

Installation

EVC Series can be wall mounted by use of back-plate with molded-in template, or ceiling and end mounted with the use of supplied canopy to standard 3-1/2" or 4" square or octagonal electrical boxes. Conduit entry through a molded-in entry point at the top center. Pre-stripped AC input leads provided.

Illumination

The EVC Series provides bright and uniform illumination and increased coverage by using 2 high power LED's which are mounted in a specially designed heat dissipating lamp-head. Exit cavity illumination by red or green LED's with 10 year lifecycle. Each lamp-head is fully adjustable to the front or rear and side to side by use of a dual axis ratcheting design. Photometrics are available for download at www.dual-lite.com.

Compliances

Listed to UL924 Standard, NFPA 101, NFPA 70
Damp Location Listed Optional
CEC T20 Compliant

Warranty

Fixture: 3 Years Full, 5 Years Full with Spectron®
Battery: 3 Years Full, 7 Years Pro-Rata
LED Lifetime Warranty on Emergency Unit



U.S. Patents Pending

ACCESSORIES

EV Unit	2 LED Indoor Emergency Light
EVR2	2 LED Remote
EVO	2 LED Outdoor Remote
EVR2B	2 LED Remote with Black Finish
VRS3	Vandal Resistant Shield

Reference "Remote Heads and Fixtures" specification sheet for information on matching LED remote heads



EVR2 Indoor Remote



EVO Outdoor Remote

ORDERING GUIDE

EVC

Model	Faces	Letter Color	Finish	Application	Self-Diagnostics	Options
	U Universal Face	R Red G Green	W White B Black ⁷	Blank Standard Model D4 2 LED Remote Capacity D Damp Listed ²	Blank No Self-Diagnostics I Spectron® Self-Diagnostics ⁶	0 No Lamp-heads ³ FAP Fire Alarm Panel ^{1,5} FM Flasher Module ^{1,5} AF Audible Flasher ^{1,5} 24K 220-240VAC 50,60Hz with Spectron® ⁴

¹ Can only be specified with Spectron® Self-Diagnostics and remote capacity

² Damp Location Listed not available with EVCURW and EVCUGW base models, standard with all other models

³ No-head option only available on the EVC with remote capacity

⁴ -24K option only available with Spectron® Self-Diagnostic and remote capacity

⁵ FAP, FM or AF options may not be specified together

⁶ Spectron® Self-Diagnostics only available with damp

⁷ Black finish only available with damp option

NOTE: Remote Capacity Option will only power the EVR2 and EVO remotes

Note: Remote Capacity models have a minimum run-time of 120 minutes when no remotes are installed





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SPECIFICATIONS

Electronics

Upon failure of normal utility power, a solid-state transfer switch automatically activates the emergency LED lamp-heads and exit LED's. Upon resumption of normal utility power, the battery is disconnected from the load and recharged through a micro-controller based 3 stage constant current/constant voltage charger. The battery is a maintenance-free Lithium Iron Phosphate (LiFePO₄) type which operates at 6.4 VDC. The EVC series accepts dual-voltage input of 120 or 277VAC at 50 or 60 Hz, or an optional 220-240VAC input 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.

Number of Lamps- 2 High Power LEDs at 1 watt each configured so that if 1 lamp malfunctions, the remaining lamp will continue to provide illumination.

Lamp Color: Cool White

Total Lamp Output: 88 Lumens per LED

System efficacy: 80lm/W

Rated LED lifecycle: greater than 100,000 hrs or 10 years

Standard Features Include:

- 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 located at the top center
- Microprocessor controlled pulse charger

Optional Spectron Feature:

- Self-diagnostics monitors LED status, LED load transfer 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)

Operating Temperature Range:

Standard: 68°F to 86°F (20° to 30°C)

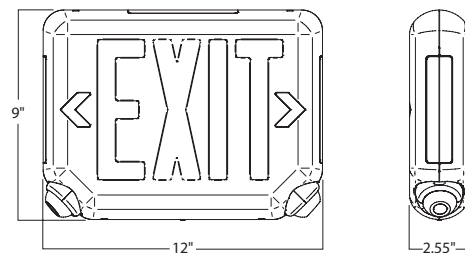
Damp Listed: 50°F to 104°F (10° to 40°C)

Weight: 2.0 lbs

MAXIMUM POWER CONSUMPTION

	AC Voltage	Hz.	Amps.	Watts	Power Factor
EVC	120	60	0.021	1.65	0.65
	277	60	0.017	2.42	0.52

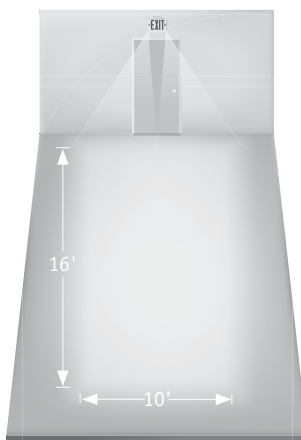
DIMENSIONS



Overall height with Canopy is 9.8"

APPLICATION INFORMATION

Single Unit Coverage



1 fc Average

Depth (D) Width (W)

16' 10'

1 fc Minimum

Depth (D) Width (W)

6' 10'

Meets Life Safety Code minimum illuminance of 0.1 fc and average illuminance of 1.0 fc. Assumes open space with no obstructions, mounting height of 7.5', ceiling height of 9' and reflectances of 80/50/20. Photometry files available on the Dual-Lite web site (www.dual-lite.com).