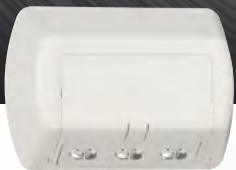


# ELSS

## Product Guide

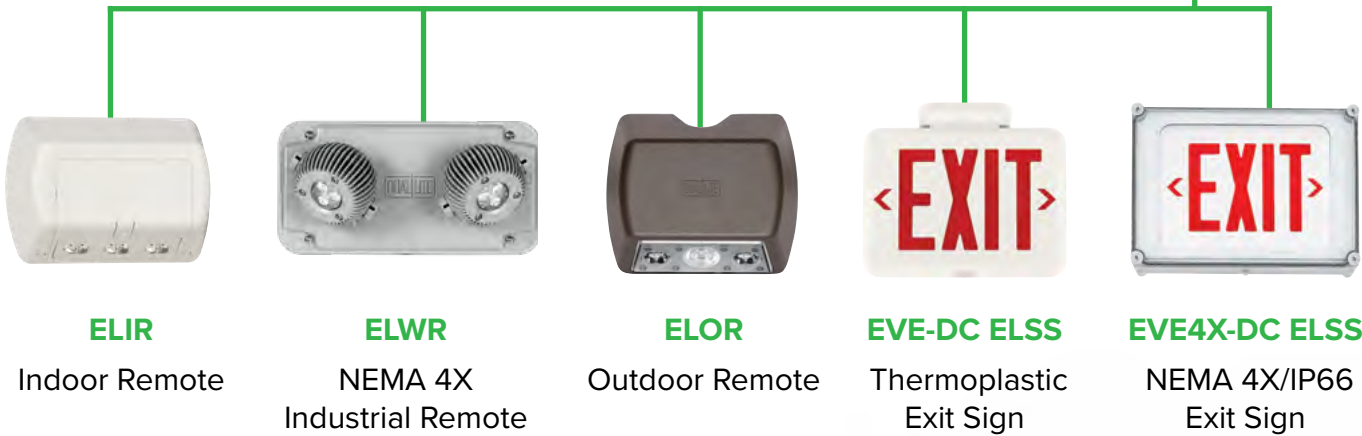
AUTHENTIC LIFE SAFETY PRODUCTS SINCE 1940



# System Overview



Dual-Lite introduces the ELSS as the Evolution of Life Safety continues. The ELSS offers the flexibility of running exit signs and remotes in multiple environments. The ELSS includes Spectron Self-Test/Self-Diagnostics to further reduce testing costs, by monitoring the status of all remotes and exit signs, and performing monthly and annual tests per NFPA requirements.



## Life Safety Code

When interior or exterior lighting extinguishes due to an interruption in the normal power supply, the Life Safety Code (NFPA 101) requires egress pathway illumination, which can be provided by a Dual-Lite ELSS. This requirement includes illuminating both the path of egress from inside the building to the nearest exit point and from outside the building to the “public way”.

**According to the Life Safety Code, emergency pathway illumination is required for:**

- |           |              |                  |
|-----------|--------------|------------------|
| Stairs    | Ramps        | Escalators       |
| Aisles    | Walkways     | Exit passages    |
| Corridors | Parking lots | Outdoor pathways |

## Advantages

- ONE LIFE SAFETY SYSTEM**  
The ELSS supplies power & illuminates remotes allowing one system to cover the entire life safety application.
- UNIT MONITORING**  
The ELSS includes Spectron® Self-Test/Self-Diagnostics to further reduce testing costs, by monitoring the status of all remotes and exit signs, and performing monthly and annual tests per NFPA requirements.
- LOW MAINTENANCE**  
Maintenance is simplified, economical and efficient by utilizing a single battery to power multiple remotes.
- ZONE OF EGRESS**  
Provides emergency power for several fixtures in a defined area.
- OUTDOOR AND INDUSTRIAL APPLICATIONS**  
Outdoor and Industrial remotes and exit signs can be specified for more hazardous spaces.



## ELSS Central Battery Unit



### Features

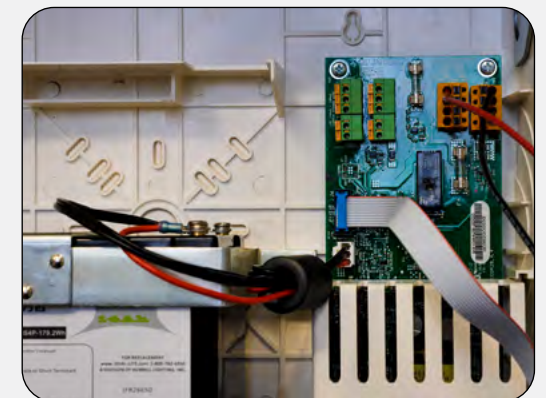
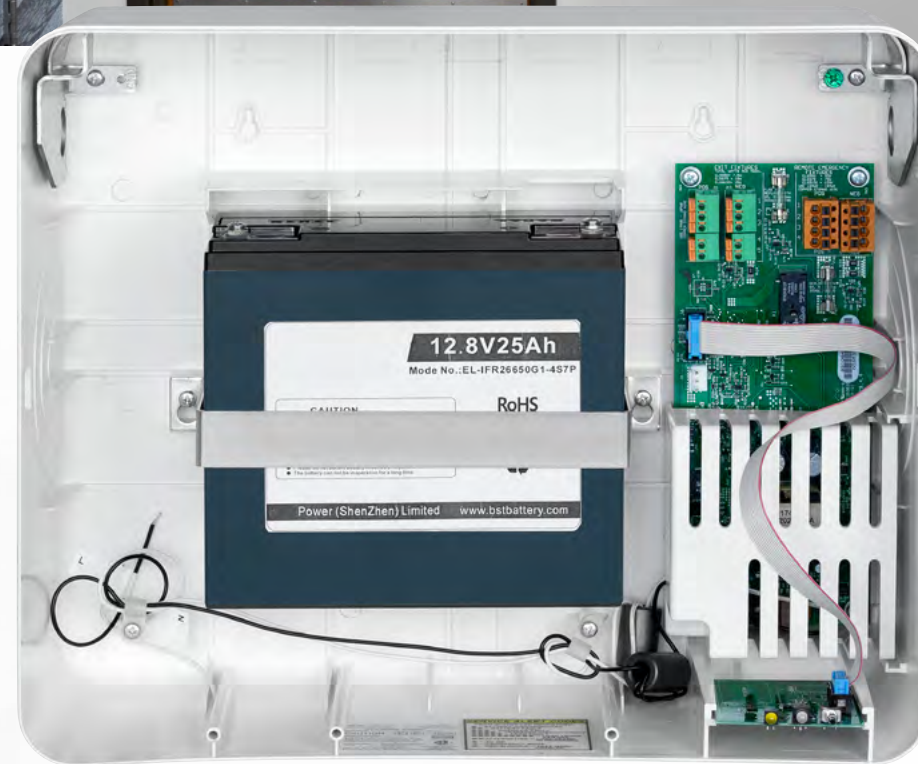
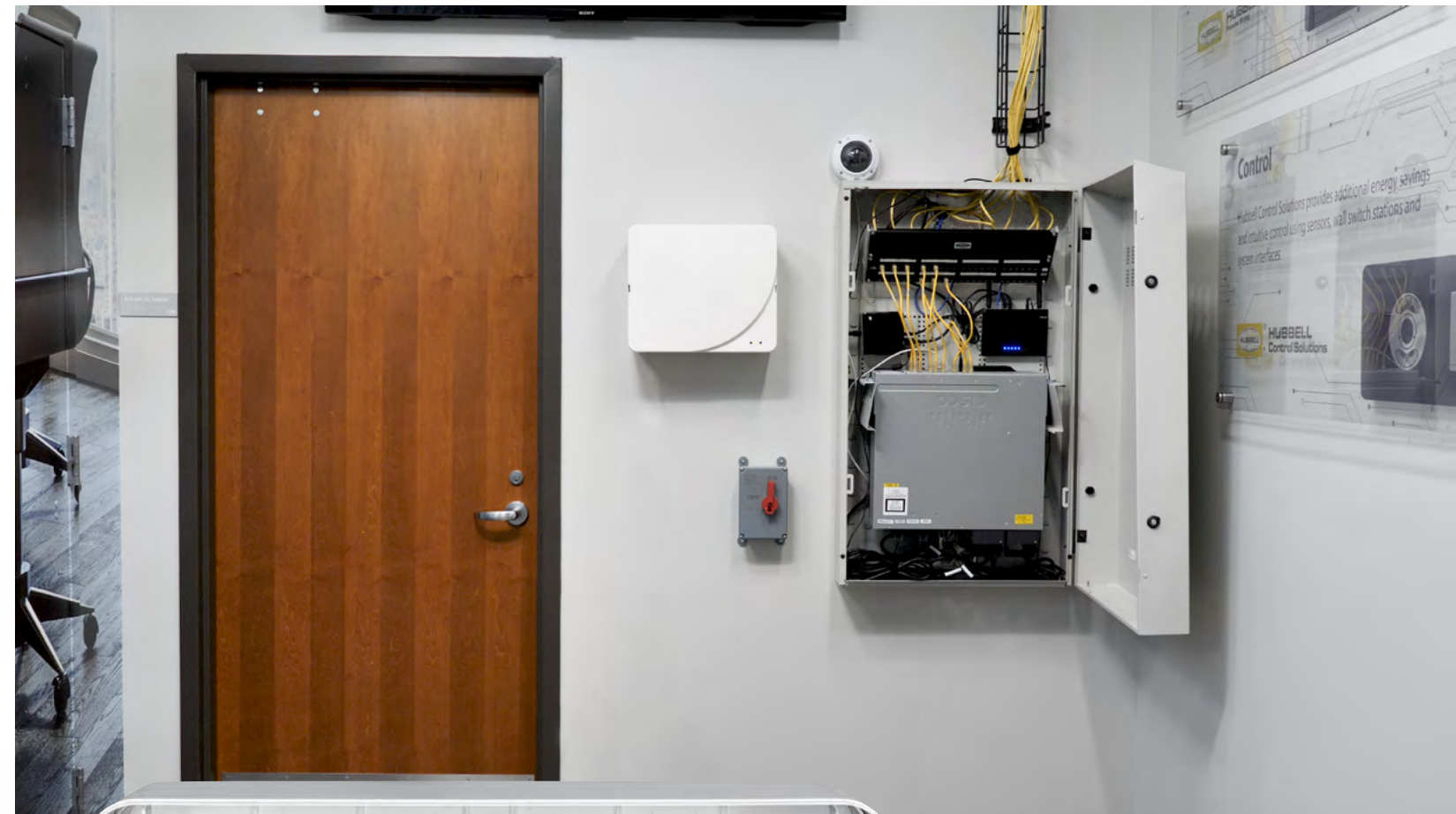
- Available in 50, 75 or 100 watt capacity
- Long-Life Lithium Iron Phosphate Battery
- Multiple distribution circuit connections and 8 conduit entry points
- Powers indoor/outdoor remotes and exit signs
- Mounts in electrical room or maintenance closet

Maintenance is simplified, economical and efficient by utilizing a single battery to power multiple remotes



### Benefits

- Central battery greatly reduces the number of batteries on-site and minimizes maintenance
- Battery lifecycle of 7 years
- Applies to new construction or retrofit
- Self-testing meets requirements of NFPA101- 1 minute monthly and 90 minute annual test
- Monitors remote LED load and system status
- Self-Diagnostics provides simple fault diagnosis
- Powers remotes up to 150' from the central battery



Easyconnect Distribution for multiple remotes and exits

Indoor Remote



- Benefits**
- Mount from 7’ to 20’ high, with spacing up to 95’
  - Remotes can be daisy chained for long corridors
  - Compact and highly architectural
  - Easy to install with no polarity required
  - Bright and even pathway illumination
  - Multiple lumen outputs offers flexibility in design

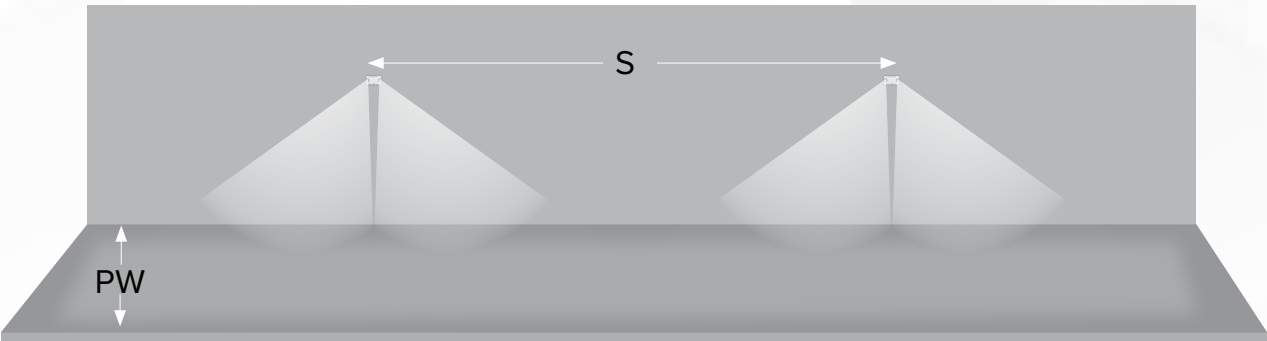


Also offered in black finish

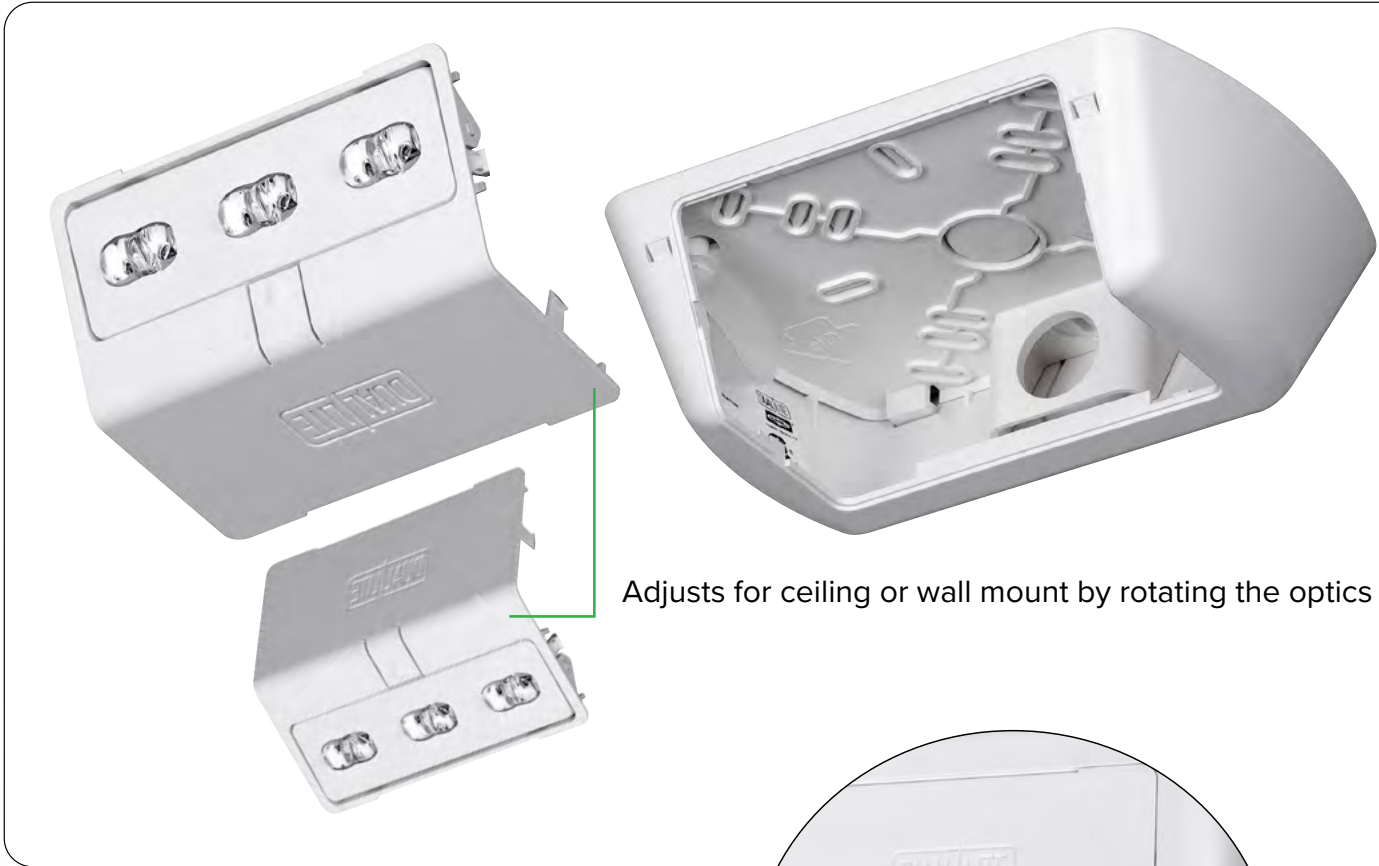


Compact size, small enough to fit in a hand

Multi-Unit Spacing



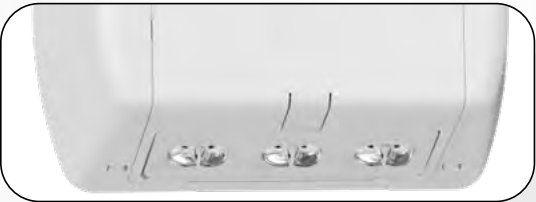
Output Power	Spacing (S)
Low	40'
Medium	60'
High	94'



Adjusts for ceiling or wall mount by rotating the optics



Adjustable lamp assembly for egress path location



**Multiple Output Options**  
Available with 3 lumen output levels:  
**Low (372lm) • Med (622lm) • High (933lm)**  
This means there is a greater flexibility given to the system layout depending on what is needed

## Outdoor Remote



### Benefits

- Wet location listed for -20° to 50°C
- Vandal resistant, durable die-cast construction with high-strength polycarbonate lens
- Includes conduit entry for surface wiring
- Can be daisy-chained for multiple units with input/output connectors provided

### Multiple Finish Colors



Dark Bronze

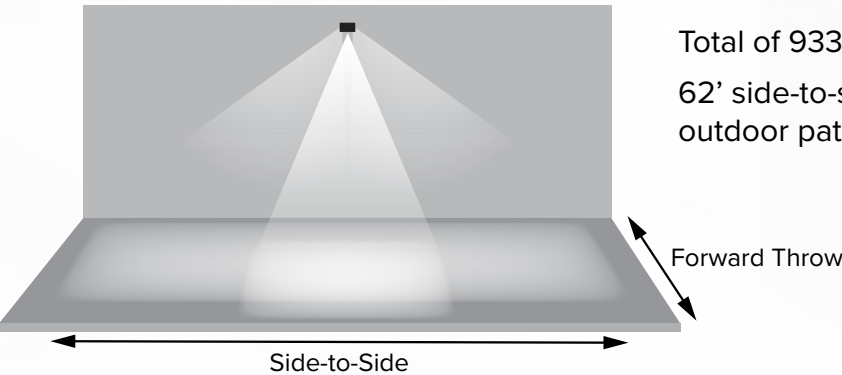


Black



White

### Multi-Unit Spacing



Total of 933 lumens with side-to-side and forward throw  
62' side-to-side coverage and 31' forward throw for outdoor path of egress

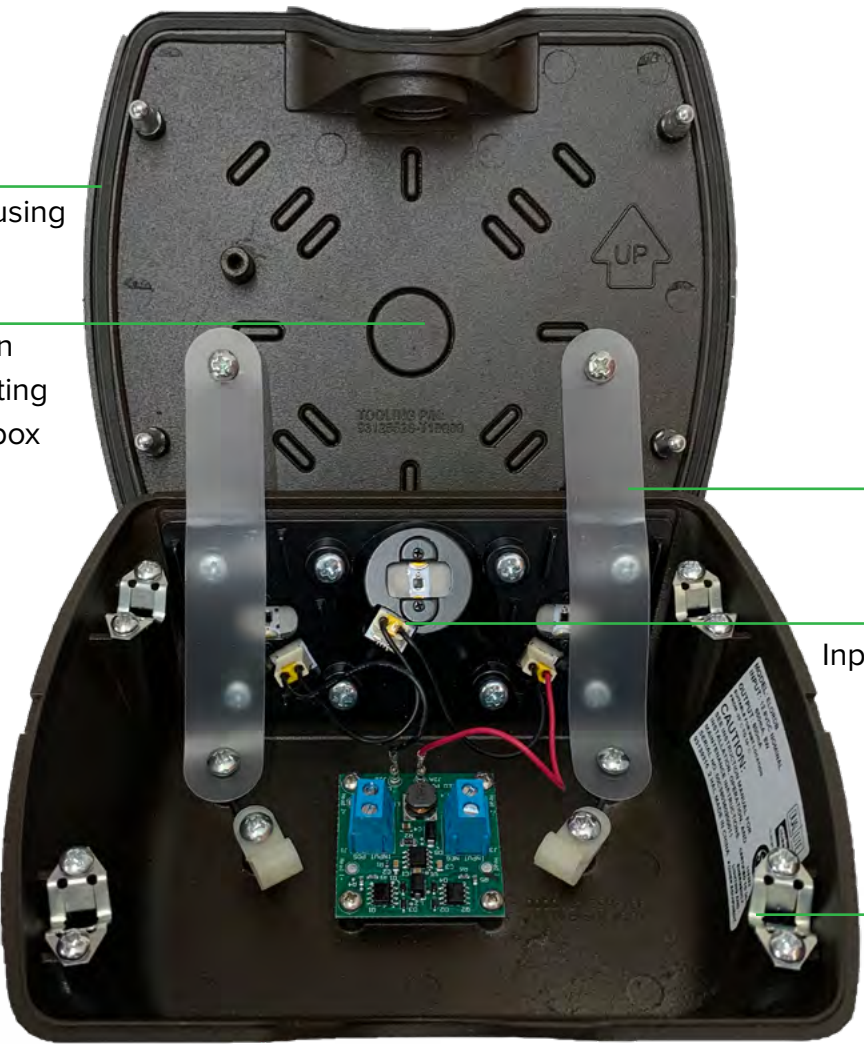
Fully Gasketed Housing

Universal Molded-In Template for mounting to standard outlet box

Helping Hand Straps

Input/Output Connectors

Ball and Socket Housing Retainers



Wet location listed durable die-cast housing



1/2" Conduit Entry



Optic design allows for maximum side-to-side and forward throw

NEMA 4X Industrial Remote



Benefits

- Offers up to 110’ multiple unit spacing using HP model
- NEMA 4X Certified Construction
- High powered LED lamps
- Remotes can be daisy chained for open Industrial/ Warehouse open floor-plans
- Universal molded-in template for mounting to standard outlet box

Multiple Output Options

Available with 2 lumen output levels: **Low** (696lm) • **High** (1126lm)

Fully Gasketed Housing

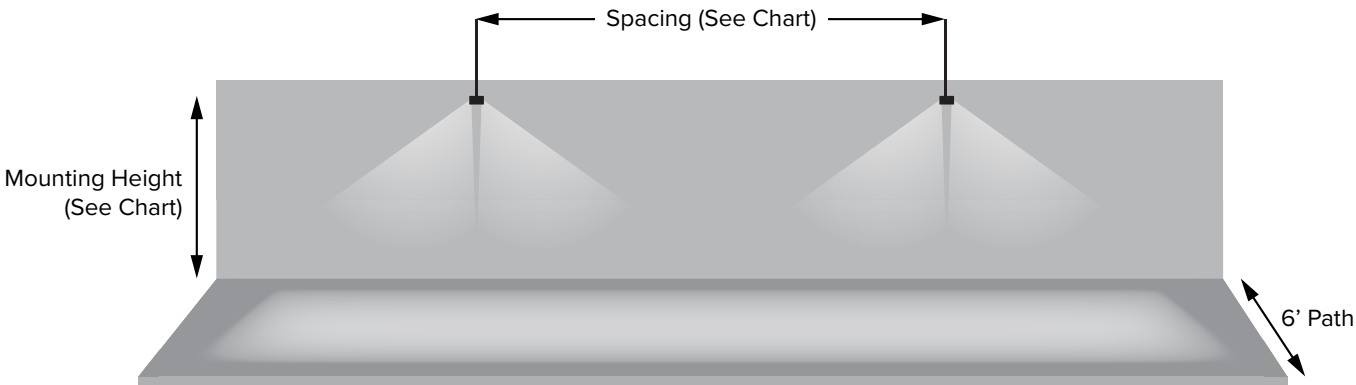


Durable polycarbonate housing  
Includes in/out conduit knock-outs

- Fully adjustable, locking, die-cast aluminum lamp heads



Multi-Unit Spacing



Industrial Parameters: Ceiling Height = 30', Reflectance = 10/10/10, Ceiling Mount Multiple Unit Spacing, 6' Path

ELWRDHP	Wall Mount Spacing						
Mounting Height	7.5'	10'	12'	14'	16'	18'	20'
Max. Spacing @ 1FC Average	110'	106'	106'	102'	100'	100'	100'
Max. Spacing @ 1FC minimum	110"	86'	90'	86'	86'	86'	90'

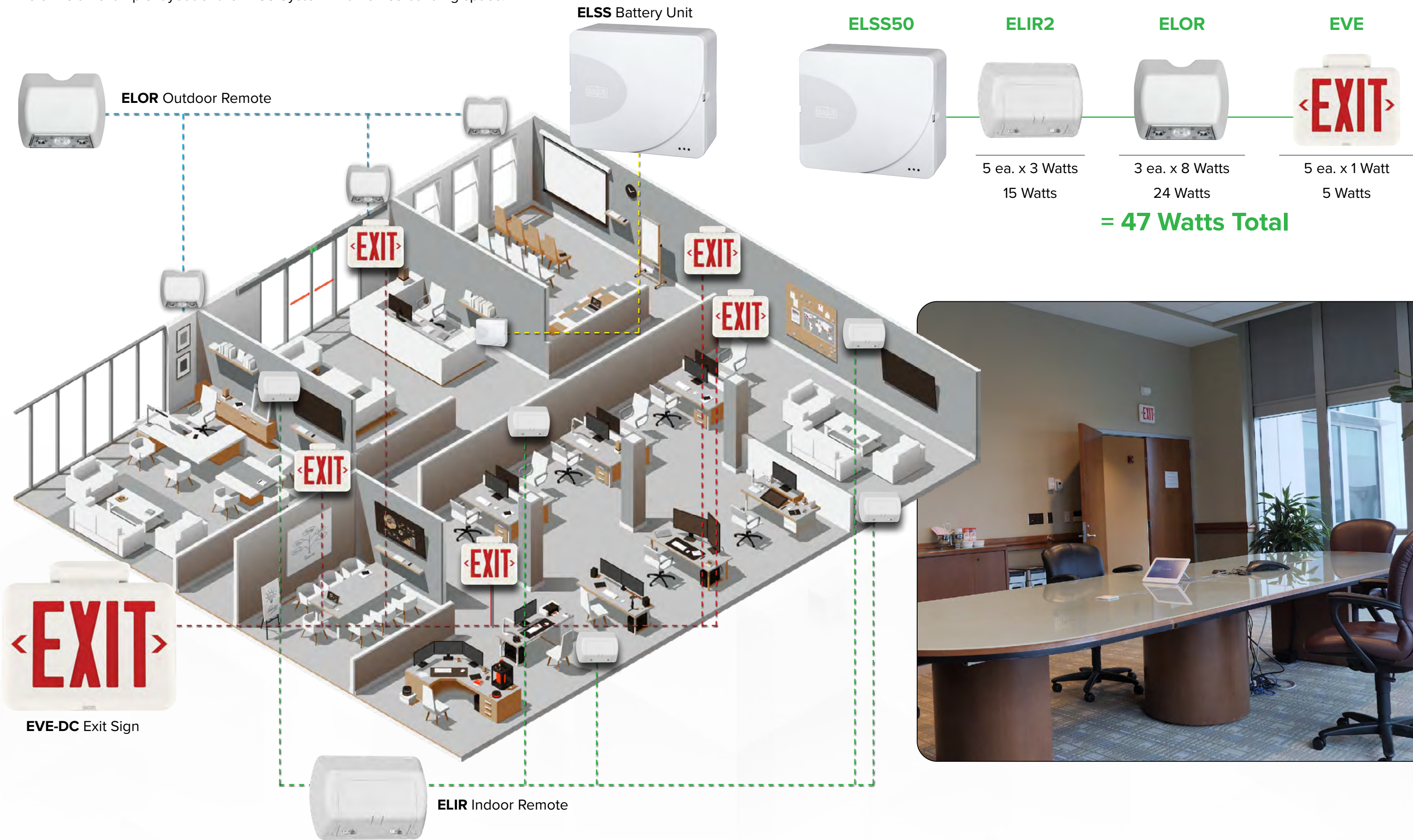
EVE & EVE4X Exit Signs

The ELSS also continuously powers the EVE and EVE4X Exit signs when normal AC power is present, or in the event of power loss.

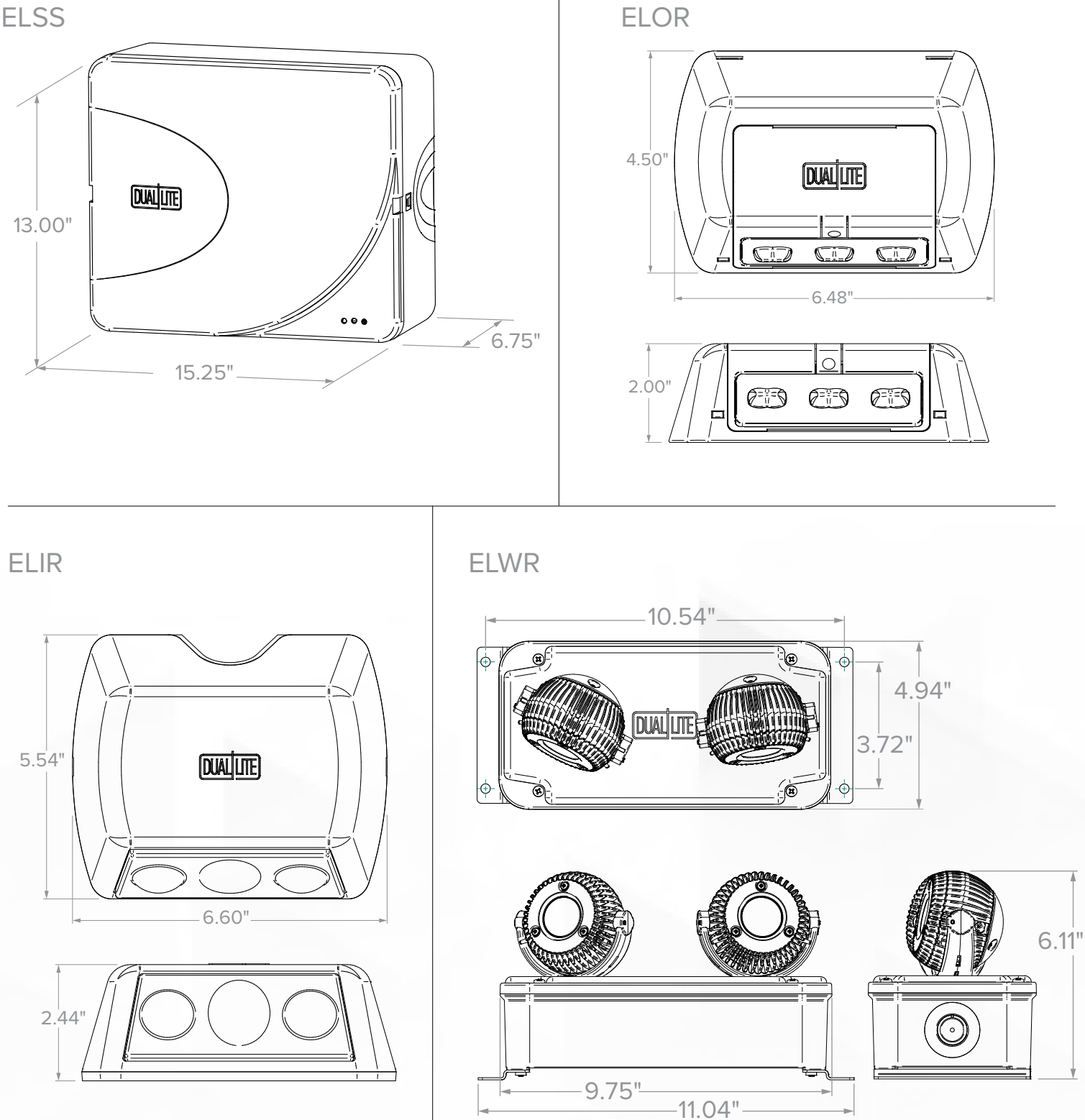


# Layout Example

Below is an example layout of the ELSS System in an office building space.



Dimensions



Ordering

ELSS					Accessories (See spec sheets for associated remote offering and performance)	
Model		Capacity		Rating	Self-Diagnostics	
ELSS Central Battery System	50	50 Watts	Blank	Damp Location	Blank	Spectron Self-Test/Self-Diagnostics
	75	75 Watts				
	100	100 Watts				
<div><input type="checkbox"/> <b>ELIR</b> Indoor LED Remote</div> <div><input type="checkbox"/> <b>ELOR</b> Outdoor LED Remote</div> <div><input type="checkbox"/> <b>ELWR</b> Industrial NEMA 4X/IP66 Remote</div> <div><input type="checkbox"/> <b>EVE4X-DC</b> DC NEMA 4X Exit Sign</div>						

REMOTE LOAD GUIDE



Part Number	Required Watts	Spacing (7.5MH)
ELIR2	3W	30'
ELIR2HP	6W	60'
ELIR3	9W	90'



Part Number	Required Watts	Spacing (7.5MH)
ELOR	8W	62' Fwd x 31' Side



Part Number	Required Watts	Spacing (7.5MH)
ELWRD	10W	94'
ELWRDHP	16W	110w'

MAXIMUM POWER CONSUMPTION

	AC Voltage	Hz.	Amps.	Watts	Power Factor
ELSS50	120	60	0.17	19.5	.9
	277	60	0.09	20.2	.9
ELSS75	120	60	0.23	26.0	.9
	277	60	0.11	27.0	.9
ELSS100	120	60	0.31	36.0	.9
	277	60	0.14	36.0	.9

UNIT CAPACITY SELECTOR

Std. Models	Total Watts For:			
	90 Minutes	2 Hours	3 Hours	4 Hours
ELSS50	50	40	25	20
ELSS75	75	60	36	30
ELSS100	100	90	50	40

OPERATING TEMPERATURE RANGE

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

ELSS ELECTRICAL

The ELSS includes a distribution section on the main PCB which connects the normally-off remotes with up to 4 separate circuits. Also includes normally-On Exit connections for 5 individual connections.

Upon failure of normal utility power, a solid-state transfer switch automatically activates the remote lamp-heads. Upon resumption of normal utility power, the battery is disconnected from the load and recharged through a microprocessor controlled pulse charger. The battery is a maintenance-free Lithium Iron Phosphate (LiFePO4) type. The ELSS series accepts dual-voltage input of 120 or 277VAC at 50/ 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.

Spectron® 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 90 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 retransfer delay
- Automatic unit transfer in brown-out conditions (below 80% of nominal AC input voltage)



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