

Type No. \_\_\_\_\_

Job Name \_\_\_\_\_

Catalog No. \_\_\_\_\_



A DIVISION OF QUINCY THOMAS GROUP, LLC

# L100W/L85W



Shown: L100W2H126W



Listed to 924

- LEC-361/LC-310 Powered Heavy Duty Emergency
- 6 Volt, 87 or 85 Watt Capacity
- Industrial Duty, Sealed Lead Calcium Batteries by Lightguard

## Batteries

### LEC-361 (used with L100W)

- Extra long-life, sealed lead calcium battery
- 6 volt, 36 ampere hour (AH) minimum capacity
- Cell design protects against deep discharge and requires no addition of water
- Low specific gravity 1.25 (±.10) reduces corrosion rates and lowers electrode sulphation
- Expected life up to 20 years
- Optimum operating range of 65°F (19°C) to 90°F (32°C)

### LC-310 (used with L85W)

- Extra long-life, flooded cell, sealed lead calcium battery
- 6 volt, 36 ampere hour (AH) capacity
- Immobilized electrolyte design
- Operates at low internal pressure
- Low self-discharge rate
- Expected life up to 10 years
- Optimum operating range of 65°F (19°C) to 90°F (32°C)

Increases or decreases in temperature will affect battery performance and/or capacity. Optimum battery performance realized at 77°F (25°C).

## Housing

- 18 gauge steel enclosure and door with white epoxy powder coat finish

## Electronics

- 120/277 VAC dual voltage input capability
- Lightguard's high performance, temperature compensated, solid-state charger restores battery to full charge within 12 hours
- Brownout protection activates lights when AC voltage drops 20% below nominal
- Labor saving AC lockout feature
- Low voltage disconnect prevents deep battery discharge
- Controls include integral Ready/Standby switch; "Press-to-Test" switch; Voltmeter; AC "On" and Fast Charge Rate indicator lights

## Power Consumption

120 VAC - .22 amps, 45 watts  
277 VAC - .16 amps, 45 watts

## Code Compliance

- UL 924 listed
- NFPA 70 and NFPA 101
- NEC, BOCA and OSHA illumination standard
- L100W with two H126W lamp heads meets NRC requirements for an eight-hour run time

## Warranty

Electronics: 3 years  
LEC-361 Battery: 5 years full, 10 years pro-rata  
LC-310 Battery: 3 years full, 7 years pro-rata

## Operation

Model	Suggested Lamp Head	AC Input		DC Voltage	Watts to 87% of Rated Voltage <sup>++</sup>			
		Voltage	Wattage <sup>+</sup>		1½ hrs.	2 hrs.	4 hrs.	8 hrs.
L100W	H126W	120/277	45	6	87	65	42	24
L85W	H126W	120/277	45	6	85	65	28	14

+ Based on high rate charge after power loss

++ Per NEC Specifications

## Self-Diagnostics (optional)

- OmniTest Self-Diagnostics includes automatic and manual tests to ensure unit is operating properly, and assists user in meeting code requirements
- Verifies battery voltage and lamp continuity every 10 seconds
- Illuminates lamps and discharges battery for 3 minutes every 30 days. A manual test is available from 1 to 90 minutes.

## Application

- Commercial, institutional and industrial locations with normal ambient temperatures where a highly reliable emergency unit with remote fixture capability is desired

# L100W/L85W

## Ordering Information

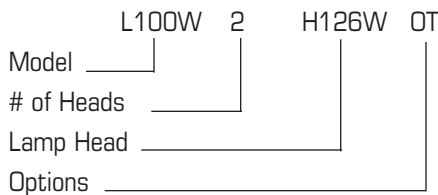
MODEL	# OF HEADS	LAMP HEAD TYPE	OPTIONS <sup>1</sup>
<b>L100W</b> = 6 Volt, 87 Watt Unit <b>L85W</b> = 6 Volt, 85 Watt Unit	<b>3</b> = Three <b>2</b> = Two <b>1</b> = One <b>blank</b> = No lamp heads	See lamp head selection chart below -- for additional heads, refer to the Accessories section of the Lightguard specification binder.	<b>EX</b> = Special Input Transformer (Specify voltage & frequency) <b>LC</b> = Line Cord (6', 120 VAC - Field Installed) <b>OT</b> = OmniTest Self-Diagnostics <b>OTAL</b> = OmniTest with Audible Alarm <b>OTTD</b> = OmniTest with Time Delay <sup>3</sup> <b>TD1</b> = 120 VAC Time Delay <sup>2, 3</sup> <b>TD2</b> = 277 VAC Time Delay <sup>2, 3</sup>

ACCESSORIES (Ordered Separately)
<b>WG</b> = Wire Guard <b>MBB6</b> = Mounting Bracket <b>URT612</b> = Universal Remote Test (URT)

### NOTES:

- 1) Some option combinations may impact UL listing. Consult factory for specifics.  
2) Not available with OT, OTAL, or OTTD options.  
3) 15 minute delay.

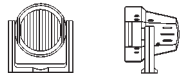
## Ordering Example



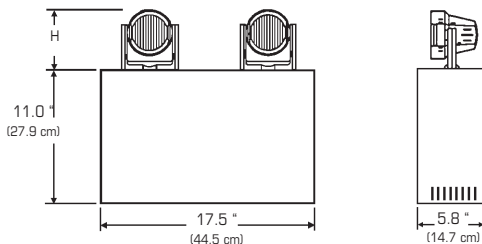
## Lamp Head Selection

Lightguard's H-Head is the suggested head for the L100W and L85W. The H-Head is constructed of high impact polycarbonate, and is offered in white to match the housing of the L100W and L85W. The H-Head features dual-axis swivel mount and is available with 6 volt halogen lamps. Two H126W lamp heads mounted on the L100W meets NRC requirements for an eight-hour run time.

Lightguard offers many other lamp heads that can be used with the L100W and L85W. For lamp head details, please refer to the Accessories section of the Lightguard specification binder.

HEAD TYPE	DC VOLTAGE	DC WATTAGE	ORDER CODE
H-Head, Thermoplastic 	6 VOLT HALOGEN	7 watt 12 watt	<b>H76W</b> <b>H126W</b>

## Dimensions



Lamp Head	Height (H)
H	3.5" (8.9 cm)
X	6.25" (15.9 cm)
PRL(H)	6.25" (15.9 cm)
J	5.0" (12.7 cm)
D	6.0" (15.2 cm)

Model	Weight
L100W	40 lbs. (18.1 kg)
L85W	28 lbs. (12.7 kg)

## Suggested Specification

Furnish and install Lightguard emergency lighting model \_\_\_\_\_. The unit shall be listed to Underwriters Laboratories, Inc. Standard #924 and shall meet the standards of the National Electrical Code (NEC).

**INSTALLATION /OPERATION** - Unit shall be easily field connected to a 120 or 277 volt, 60 hertz, unswitched power source. Installation must comply with the NEC Code as well as other applicable codes. Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within 12 hours following a rated discharge of not more than 90 minutes.

**CHARGER** - The charger shall be solid-state, SCR controlled, full wave and current limited, and shall utilize a pulse current charge to extend battery life. It shall include temperature compensation for temperature variations from 77°F. Components shall operate at less than 50% of their rating to ensure reliability and long life. The charger shall maintain the battery at full capacity without the need for periodic exercising or equalizing. The following features shall be standard: Low Voltage Disconnect; Brownout Protection; AC Lockout.

**BATTERY (LEC-361)** - The battery shall be Lightguard's LEC-361 (L100W model) battery, and shall be capable of a 32.4 watt discharge at 10 hours, with a minimum AH rating of 36 AH. The LEC-361 battery shall be a completely sealed, extra long-life, lead calcium type with plates constructed of calcium tin alloy lead grids. The LEC-361 battery shall never need addition of water or electrolyte, and shall operate completely unattended for up to 20 years. The battery shall consist of three cells for a total of six volts with a specific gravity of 1.25 (±.10) at 77°F at the eight-hour rate to a final voltage of 1.75 per cell. The battery casing shall be constructed of polycarbonate with a permanently sealed cover and self-sealing vents to permit the escape of undue pressure build-up. The plates shall be constructed of calcium tin alloy grids and separated by microporous rubber, which enables the electrolyte to circulate freely during charging and discharging. The battery shall be warranted for 15 years (5 full, 10 prorated) with a written, full disclosure warranty.

**HOUSING** - The cabinet and door shall be constructed of 18 gauge steel with a white epoxy powder coat finish.

**SELF-DIAGNOSTICS (optional)** - The unit shall include OmniTest self-diagnostics. OmniTest shall conduct the following automatic tests: battery voltage and lamp continuity every 10 seconds, a 3 minute battery discharge and lamp illumination test every 30 days, and a 30 minute battery discharge and lamp illumination test every 6 months. OmniTest shall also conduct the following manual tests: three minute, 30 minute and 90 minute battery discharge and lamp illumination tests and optional audible alarm test.

**CONTROLS** - The unit shall include a Ready/Standby switch, "Press-to-Test" switch, voltmeter, AC "On" and Fast Charge Rate indicator lights.



L2029R6  
3/01 IH