

Type No. _____
Job Name _____
Catalog No. _____



Shown: U12LT61RWDL



Unison I Series

- **Thermoplastic Combination Emergency LED Exits**
- **High Performance, Adjustable Lamp Reflector Systems**
- **LED Illumination**

Housing

- Contractor-friendly, snap-together backplate and housing
- Provisions are available for utility supply via 1/2" surface conduit
- UL 94 V-0, 5 VA high impact thermoplastic
- Available in black or white
- Thermoplastic backplate includes mounting knockouts for easy installation to standard junction boxes
- Stencil face is easily removed for maintenance
- Field-selectable chevrons can be installed and/or removed from outside the exit housing
- Canopy furnished with all models

Battery

- Batteries are installed and connected to the charger system at the factory
- Maintenance free, sealed lead calcium battery has an expected service life of 5 years with an operating range of 65°F (19°C) to 85°F (30°C)*
- Maintenance free, sealed nickel cadmium battery has an expected service life of 10 years with an operating range of 20°F (-7°C) to 95°F (35°C)*
- Nickel cadmium batteries are ideal for high ambient temperature areas

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

Illumination

- Emergency illumination is provided by two high performance lamp reflector systems integral to the product housing
- Each lamp reflector system can be adjusted 180° vertically and 180° horizontally
- Standard lamp reflector system uses a high intensity 5.4 watt T-5 wedge base tungsten lamp (7 and 12 watt halogen lamps available)
- High impact polycarbonate diffuser utilizes linear frosted sections to control sight-line glare and maximize reflector efficiency
- Illumination of the exit face is accomplished with long lasting, high output Light Emitting Diodes (LEDs)
- Hot spots and striations are eliminated by the internal "light chamber" specially designed around the high performance LED array
- LED and support electronics have an expected service life of 25 years

Electronics

- 120/277 VAC dual voltage input with surge protection
- Lead calcium units utilize a solid-state, fully automatic, voltage regulated charger
- Nickel cadmium units utilize a solid-state, constant current charger
- Brownout protection activates lights when AC voltage drops 20% below nominal
- Labor saving AC lockout feature
- Low voltage disconnect switch (LVD) prevents deep battery discharge

Electrical Specifications

- Input power requirements:
 - 12 watt unit = 0.114 amps (120 VAC),
0.054 amps (277 VAC)
 - 14 - 25 watt units = 0.118 amps (120 VAC),
0.056 amps (277 VAC)

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

Code Compliance

- UL 924 listed
- UL damp location listing optional
- NFPA 101, NEC, BOCA, OSHA, and IBC illumination standards

Application

- Ideal for commercial, retail, and office locations where an attractive, highly reliable and easily installed combination emergency/exit sign is needed. The Unison I Series meets the Buy American requirements.

Warranty

- Electronics: 3 years
- Batteries: 1 year full, 4 years pro-rata (lead calcium)
5 years full, 5 years pro-rata (nickel cadmium)

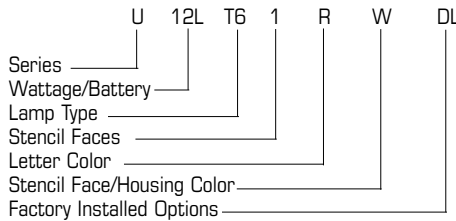
Unison Series Combination Emergency LED Exits

Ordering Information

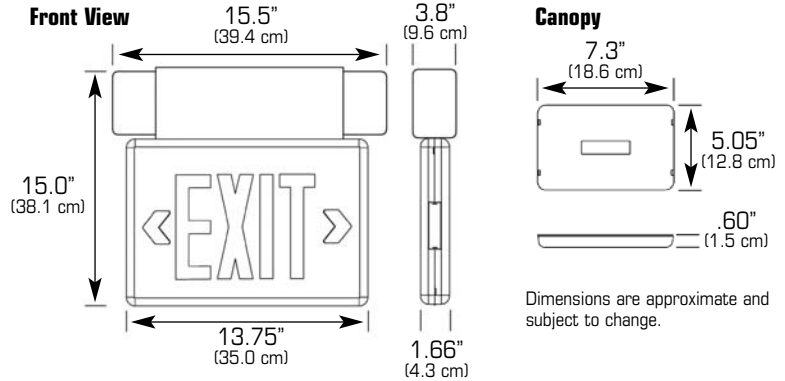
U						
SERIES	WATTAGE/ BATTERY	LAMP TYPE ¹	STENCIL FACES	LETTER COLOR	STENCIL FACE/ HOUSING COLOR	FACTORY INSTALLED OPTIONS ²
U = Unison Series Thermoplastic Combination Emergency Exit	<u>Lead Calcium</u> 12L = 12 Watts 18L = 18 Watts 25L = 25 Watts <u>Nickel Cadmium</u> 14N = 14 Watts 18N = 18 Watts	T6 = Tungsten, 5.4W T7 = Tungsten, 7W T9 = Tungsten, 9W H7 = Halogen, 7W H12 = Halogen, 12W	1 = Single U = Universal Single/ Double Face	R = Red G = Green	W = White B = Black	BF = Buzzer/Flasher (Emergency Only) ³ BZ = DC Buzzer (Emergency Only) ³ DL = UL Damp Location Listing ^{3,5} EX = Special Input Transformer (220/240 VAC 50 Hz) FA = 24 VDC Fire Alarm Interface FL = Emergency Flasher ³ LL = Low Level Institutional Frame Surface Mount Remote Exit ^{3,4} LP = Low Level Matching Thermoplastic Exit ^{3,4} OT = OmniTest Self-Diagnostics TP = Tamperproof VRS = Vandal Resistant Lens with Tamperproof Hardware

NOTES: 1) Selected lamp wattage cannot exceed unit output rating. Standard lamp configuration utilizes T-5 wedge base 5.4 watt 6 volt lamp. 2) Some option combinations may impact UL listing. Consult factory for specifics. 3) Not available with OT option. 4) "LL" and "LP" options are only available with 18 or 25 watt models. 5) Available on 25 watt lead calcium and all nickel cadmium battery units.

Ordering Example



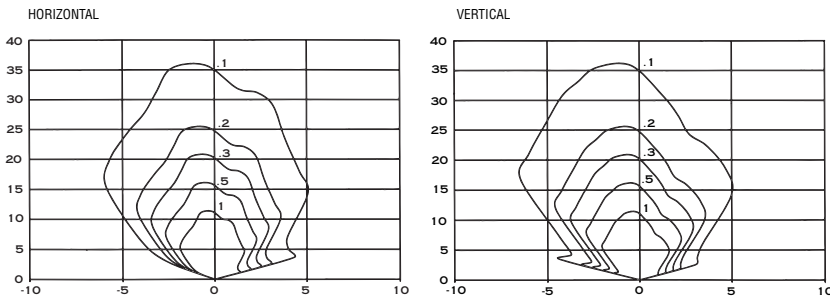
Dimensions



Dimensions are approximate and subject to change.

Lamp Head Photometrics

T6 Lamp



Operation

DC Voltage	Unit	Watts to 87½% of Rated Voltage**		
		1½ hrs.	2 hrs.	4 hrs.
6	U12LT6	12.0	—	—
6	U18LT6	18.0	13.5	7.0
6	U25LT6	25.0	19.0	9.5
6	U14NT6	14.0	10.5	5.5
6	U18NT6	18.0	13.5	7.0

** Per NEC Specifications

Suggested Specification

Furnish and install LightGuard combination emergency exit sign model _____. The exit shall be listed to Underwriter's Laboratories, Inc. Standard #924 and shall meet the standards of the National Electrical Code (NEC).

INSTALLATION AND OPERATION - Exit shall be easily field connected to a 120 or 277 VAC, 60 hertz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. (Emergency Operation Only) - Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

CHARGER (Emergency Operation Only) - Product shall utilize a fully automatic, voltage regulated (lead calcium) or constant current (nickel cadmium) charging system which will maintain the battery at full capacity without the need for periodic exercising or equalization. The following features shall be standard: low voltage disconnect (LVD), brownout protection and AC lockout. Optional self-diagnostics shall monitor and indicate a fault occurring in either the charger, battery, lamp circuit, or input supply.

SELF DIAGNOSTICS - Unit shall contain a microprocessor controlled self test module that monitors battery voltage and charging current. If this module detects a fault, the user will be notified via a status indicator lamp. In addition, an automatic discharge test is performed for 3 minutes every 30 days in compliance with requirements set forth by NFPA101 Section 31-1.

BATTERY (Emergency Operation Only) - The battery shall be either a maintenance free, sealed lead calcium or sealed nickel cadmium. Sealed lead calcium batteries shall provide trouble-free operation in temperatures up to 85° (30°C) and are supplied with a one year full warranty. Nickel cadmium batteries shall provide trouble-free operation in temperatures up to 95°F (35°C) and are supplied with a five year warranty. The battery shall be factory installed, and will not require internal connection prior to energizing the product.

ILLUMINATION - Illumination shall be provided by two internally mounted, fully adjustable reflector systems utilizing either a high output tungsten, or tungsten halogen lamp source. Lamp reflectors shall be constructed of a high efficiency parabolic lamp chamber which can utilize lamp wattages up to 12 watts. When mounted on 20' centers, at 9.0' AFF the product shall provide an average of one footcandle along a linear path of egress. Exit sign illumination shall be indirect, and accomplished by utilizing high intensity LEDs. The LEDs shall be designed so that the unlikely failure of one LED will not affect the integrity of the total sign while in the emergency mode, and their related electronic circuitry shall have a rated life of 25 years when operated in a normal commercial, institutional, or industrial environment.

HOUSING - Housing construction shall be impact resistant UL 94 V-0, 5 VA rated thermoplastic. Product shall be furnished with the standard white or black finish. Units shall be designed to back mount or canopy mount to 3-1/2", 4" octagon, or 4" square junction boxes and will be supplied with a knockout pattern to facilitate mounting. Modular utility supply connectors integral to the backplate and housing shall eliminate hardware line voltage terminations inside of the product housing. The housing and backplate, or housing, canopy and mounting plate (ceiling mounting) shall snap together without the use of tools.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



272 West Stag Park Service Road • Burgaw, NC 28425
 (910) 259-1131 • FAX (800) 403-6927
 www.lightguard.com

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