

Type No. \_\_\_\_\_  
 Job Name \_\_\_\_\_  
 Catalog No. \_\_\_\_\_



Shown: U18LH6WSC



# Unison Series

- **6 or 12 Volt, 18 to 72 Watt Units**
- **Sealed Lead Calcium or Nickel Cadmium Battery**
- **Smart Charger Diagnostics**

## Housing

- Constructed of impact-resistant and UV stabilized UL 94 V-0, 5 VA thermoplastic
- The one-piece housing is provided with a universal knockout pattern for easy installation to standard junction boxes
- Keyhole slot knockouts are provided for additional mechanical support to wall surfaces
- A modular quick-connect plug-in wiring harness will allow line voltage connections in either the junction box or the product housing
- An optional mounting plate and strapping kit (SUMK) may be used to mount the product to columns, poles and I-beams

## Battery

- Batteries are installed and connected to the charger system at the factory
- Maintenance free, sealed lead calcium battery provides 90 minutes of emergency power and has an estimated service life of 5 years
- A maintenance free, sealed nickel cadmium battery is also available and has an estimated service life of 10 years
- A quick-connect wire harness is supplied to simplify installation

## Illumination

- Illumination is provided by two high performance lamp choices: MR16 or bi-pin halogen
- Each lamp reflector system can be adjusted 180° vertically and 90° horizontally
- A high impact polycarbonate diffuser controls sight-line glare and maximizes reflector efficiency
- IES photometry is available at [www.lightguard.com](http://www.lightguard.com) or contact the factory

## Operating Temperature Range

- Standard Location: 65°F (19°C) to 85°F (30°C)
- Damp Location: 32°F (0°C) to 104°F (40°C)

## Application

- Ideal for commercial, retail, office or educational locations where an attractive, highly reliable and easily installed emergency lighting product is needed. The Unison Series meets the Buy American requirements

## Electrical Specifications

- 6 VDC Models: 120 VAC = 0.139A, 277 VAC = 0.060A
- 12 VDC Models: 120 VAC = 0.288A, 277 VAC = 0.125A

## Warranty

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

## Smart Charger Electronics

### AC Only

- 120/277 VAC dual voltage input with surge protection is standard on all models

### Self-Powered Operation

- Charging system is microprocessor driven with software embedded diagnostic routine and temperature compensation
- See Smart Charger specification sheet L2368 for electronics details
- 120/277 VAC input, surge protection, brownout, AC lockout and low voltage disconnect features are standard

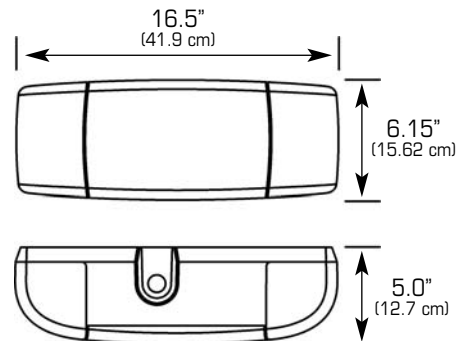
## Smart Charger Self-Testing Diagnostics (Optional)

The Smart Charger diagnostic/charging platform with optional self-testing mode automatically runs a one-minute self-test every 30 days and a 30-minute test on the sixth and twelfth month. A one-minute or 90-minute test may be initiated via the push to test switch on the unit or by activating the appropriate test command on the optional IR test device.

## Code Compliance

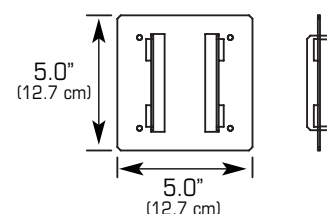
- UL 924 listed
- UL Damp Location listing optional
- NFPA 101, NEC, BOCA, OSHA, and IBC illumination standards

## Dimensions



Dimensions are approximate and subject to change.

## Mounting Plate (Accessory Item SUMK)



# Unison Series 6 or 12 Volt, 18-72 Watts

## Ordering Information

SERIES	BATTERY/WATTAGE	LAMP TYPE	HOUSING COLOR	SC	FACTORY INSTALLED OPTIONS <sup>2</sup>
<b>U</b> = 6 Volt, Unison Series Thermoplastic Emergency Lighting Unit  <b>U2<sup>1</sup></b> = 12 Volt, Unison Series Thermoplastic Emergency Lighting Unit	<b>Lead Calcium</b> 18L = 18 Watt Unit <sup>5</sup> 25L = 25 Watt Unit <sup>5</sup> 36L = 36 Watt Unit 50L = 50 Watt Unit 72L = 72 Watt Unit  <b>Nickel Cadmium</b> 25N = 25 Watt Unit 50N = 50 Watt Unit	<b>6 Volt</b> H6 = Halogen 6W H7 = Halogen 7W H10 = Halogen 10W H12 = Halogen 12W  <b>12 Volt</b> T12 = Halogen 12W H12 = Halogen 12W MR16 Flood H20F = Halogen 20W MR16 Flood H20S = Halogen 20W MR16 Spot	<b>W</b> = White <b>B</b> = Black	<b>SC</b> = Smart Charger Diagnostics  <b>ACCESSORIES (Ordered Separately)</b> <b>SCIR</b> = Smart Charger Infra-Red Remote <b>PVS</b> = Polycarbonate Vandal Shield <b>WGS</b> = Wire Guard <b>SUMK</b> = Universal Mounting Kit for Columns, Poles and I-beams <b>T151PTOOL</b> = Tamperproof Driver and Bit	<b>A</b> = Ammeter <b>ACF</b> = 120/277 VAC Input Fuse <b>ACP</b> = 120/277 VAC Power Switch <b>DCP</b> = DC Battery Disconnect Switch <b>DL</b> = Damp Location Listing <sup>4</sup> <b>EX</b> = Special Input Transformer <sup>2</sup> (specify voltage & frequency) <b>T</b> = Self-Testing Diagnostics (non-audible) <b>TA</b> = Audible Self-Testing Diagnostics <b>TD</b> = Time Delay <sup>3</sup> <b>TP</b> = Torx Tamperproof Hardware, Includes Bit <b>V</b> = Voltmeter
<b>NOTES:</b> 1) 12 VDC models only available in 36, 50 and 72 watt lead calcium, 25 and 50 watt nickel cadmium. 2) Some option combinations may impact UL listing. Consult factory for specifics. 3) 15 minute delay. 4) 72 watt units not available with DL option. 5) 18 and 25 watt lead units not available in 12 volt models.					

### Remote Lamp Assembly



#### 6 Volt

URH6W = 6 V, 6 W, Halogen Bi-Pin  
 URH7W = 6 V, 7 W, Halogen Bi-Pin  
 URH10W = 6 V, 10 W, Halogen Bi-Pin  
 URH12W = 6 V, 12 W, Halogen Bi-Pin

#### 12 Volt

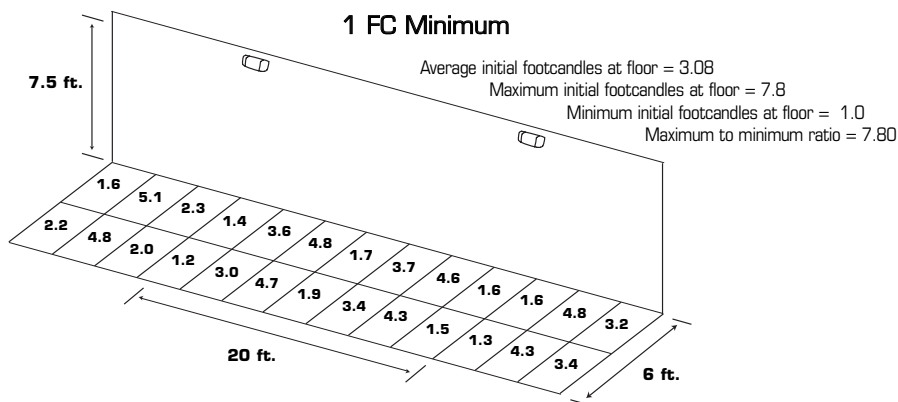
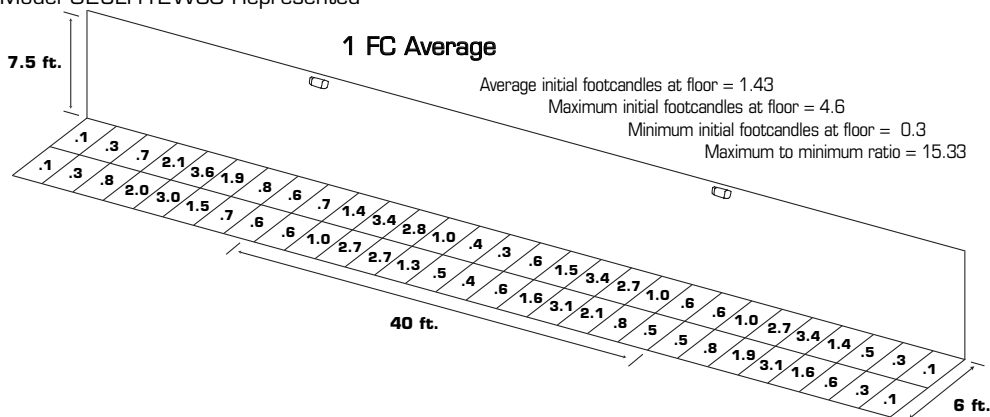
UR2T12W = 12 V, 12 W, Halogen Bi-Pin  
 UR2H12W = 12 V, 12 W, Halogen MR16 Flood  
 UR2H20FW = 12 V, 20 W, Halogen MR16 Flood  
 UR2H12S = 12 V, 20 W, Halogen MR16 Spot

For black backplate & lamp heads, replace the 'W' with a 'B'.  
 Example = URH6B

\* The optics layout shown is intended to be used as reference only. Standard reflectances used were 80/50/20. LightGuard is not responsible for site specific conditions that may alter the results.

### Optics\* (IES formatted files are available on-line)

Wall mounted 7.5' AFF, 6' Corridor  
 Model U25LH12WSC Represented



## Suggested Specification

Furnish and install LightGuard's commercial emergency lighting model \_\_\_\_\_. The unit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and must be installed to conform to Article 700 of the National Electrical Code (NEC).

**INSTALLATION AND OPERATION** - Unit 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. Upon utility power failure or brownout, the unit shall automatically provide emergency battery power and maintain the stated illumination level and output wattage for a minimum period of 90 minutes. Upon restoration of utility power, the charging circuitry shall restore the battery to full charge within UL 924 requirements following a rated discharge of not less than 90 minutes.

**ELECTRONICS** - All models shall be provided with LightGuard's Smart Charger self-diagnostics electronics platform. Smart Charger will detect and notify the installer regarding incorrect wiring of the transformer primary and restrict the damaging effects from affecting the printed circuit board. The Smart Charger electronics package shall provide continuous, real-time monitoring of all the critical equipment functions including, but not limited to: line voltage status and condition, charger fault, transfer fault, battery fault and lamp load fault and notify personnel with a visual indicator sequence. Optional audible diagnostics shall be available from the factory. The optional self-testing software shall satisfy the periodic testing requirements in NFPA 101, Life Safety Code as well as the International Building Code (IBC). The Smart Charger diagnostic/charging platform with self-testing mode automatically runs a one-minute self-test every 30 days and a 30-minute test on the sixth and twelfth month. The Smart Charger circuit shall continuously sample ambient temperature conditions and adjust the charging regime to compensate for typical and dramatic ambient conditions equal to 3mV/°C compensation to maximize the life of the battery. An on-board IR receiver shall be standard and pre-programmed to operate from an optional IR user interface device (available as an accessory item).

**BATTERY** - The battery shall be either a maintenance free, sealed lead calcium or sealed nickel cadmium. The standard location rating shall provide trouble-free operation in temperatures ranging from 65°F (19°C) to 85°F (30°C). UL Damp Location rated models shall provide trouble-free operation in temperatures ranging from 32°F (0°C) to 104°F (40°C).

**ILLUMINATION** - Illumination is provided by two internally mounted, fully adjustable reflector systems utilizing a high output halogen lamp source. Reflectors shall be constructed of a high efficiency parabolic lamp chamber which can utilize lamp wattages up to 20 watts.

**HOUSING** - Housing construction shall be impact-resistant, UV stabilized, UL 94 V-0, 5 VA rated thermoplastic. Product shall be furnished with the white or black finish. Units shall be designed to mount to 3½", 4" square junction boxes and will be supplied with a knockout pattern to facilitate mounting. Quick-connect wiring harnesses shall be provided for both utility power and battery assemblies for ease of installation. An optional mounting plate and strapping kit (SUMK) may be used to mount the product to columns, poles and I-beams.



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