



Type No. _____

Job Name _____

Catalog No. _____



Unison Cast Series

- LED Illumination
- AC Only and Self-Powered
- Self-Diagnostics Electronics*

Shown: UCN1RWSCT

Housing

- Two-piece die cast aluminum construction with NFPA-compliant field-selectable chevrons
- Housing and stencil face castings are available with durable epoxy-based powder coat paint or brushed aluminum finishes
- A positive latching exit stencil face provides secure closure yet is easily accessible for installation, maintenance, and inspection

Battery

- Maintenance-free, sealed nickel cadmium battery supplies a minimum of 90 minutes of power in the emergency mode
- Estimated service life of 10 years

Illumination

- Illumination of the stencil face is accomplished with long lasting, high-output Light Emitting Diodes (LEDs)
- Hot spots and striations are eliminated by the internal "light chamber" allowing for even illumination in normal and emergency situations
- Average legend illumination levels exceed 25fl (79 cd/m²) during normal and emergency operation

Operating Temperature Range

- AC-Only Models: -40°F (-40°C) to 104°F (40°C)
- Self-Powered Models - Standard Location: 65°F (19°C) to 85°F (30°C)
- Self-Powered Models - Damp Location: 32°F (0°C) to 104°F (40°C)

Application

- The Unison Cast Series exit is a simple, compact exit sign that combines a die-cast housing with high performance electronics that are contained within the exit for a clean low profile and superior performance and reliability
- Softly rounded corners and various finishes allow the product to blend nicely with all interiors
- The Unison Cast Series meets the Buy American requirements and is NEMA Premium certified

Electronics

AC Only

- 120/277 VAC dual voltage input with surge protection

Emergency Operation

- Microprocessor driven charger software with routine embedded diagnostic and temperature compensation
- See specification sheet L2465 for electronics details
- 120/277 VAC input, surge protection, brownout, AC lockout and low voltage disconnect are standard

Electrical Specifications

AC Only

- Red - 0.032 A (120 VAC), 0.015 A (277 VAC), PF = 0.94
- Green - 0.035 A (120 VAC), 0.016 A (277 VAC), PF = 0.92

Self-Powered

- Red - 0.039 A (120 VAC), 0.018 A (277 VAC), PF = 0.94
- Green - 0.040 A (120 VAC), 0.018 A (277 VAC), PF = 0.94

Smart Charger Self-Testing Diagnostics (optional)

- 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. 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
- NEMA Premium certified
- Certified to the California Energy Commission in accordance with California law

Warranty

- Electronics: 5 years
- Battery: 5 years full, 5 years pro-rata

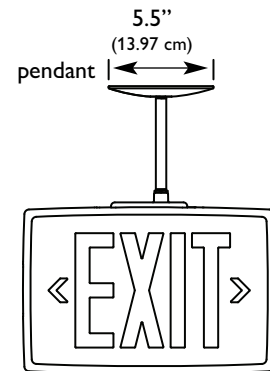
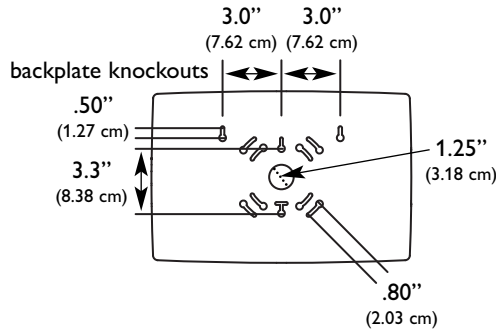
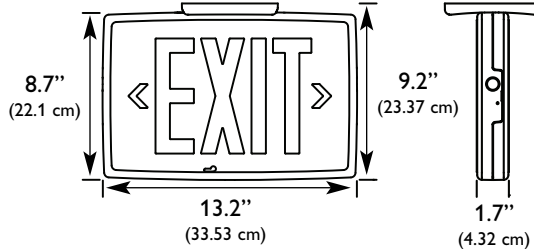
*Self-powered models incorporate the Smart Charger diagnostics electronics package. Self-testing is a factory installed option.

Ordering Information

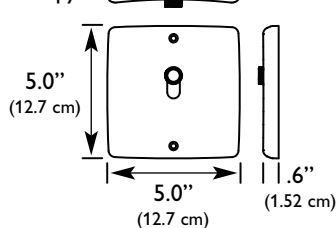
UC				SC		
SERIES	BATTERY	FACE OPTIONS	LETTER COLOR	STENCIL FACE/ HOUSING COLOR	MODEL DESIGNATOR	FACTORY INSTALLED OPTIONS ¹
UC = Unison Series Die Cast LED Exit Sign	A = AC Only N = Nickel Cadmium	1 = Single 2 = Double U = Universal Two Faces, Backplate and Canopy	R = Red G = Green	W = White Stencil Face, White Housing B = Black Stencil Face, Black Housing WA = Brushed Aluminum Face, White Housing BA = Brushed Aluminum Face, Black Housing N = Brushed Aluminum Face, Natural Aluminum Housing	SC = Smart Charger Diagnostic Electronics (emergency units only)	2CKT1 = 120/120 VAC Two Circuit (AC only models) 2CKT2 = 277/277 VAC Two Circuit (AC only models) BF = Buzzer/Flasher (emergency units only) BZ = Buzzer (emergency units only) DC = 12-48VDC Input Power (AC only models) DL = Damp Location Listed 0°C to 40°C EX = Special Input Transformer (specify voltage and frequency) FA = Fire Alarm Activated Flasher FL = Emergency Mode Flasher (emergency units only) PM = Pendant Mount Only (must order pendant kit accessory) SW = Special Wording/Graphics ² T = Self-Testing Diagnostics (non-audible) TA = Audible Self-Testing Diagnostics TP = Tamperproof Hardware and Bit VRS = Vandal Resistant Lens with Tamperproof Hardware and Bit
				ACCESSORIES (Ordered Separately) CPKIT12W = Pendant Kit, 12" White, Includes Exit Adapter Plate CPKIT12B = Pendant Kit, 12" Black, Includes Exit Adapter Plate PVS = Polycarbonate Vandal Shield SCIR = Smart Charger Infra-Red Remote T15TPTOOL = Tamperproof Screwdriver WG4 = Wire Guard, Surface Wall Mount WG10 = Wire Guard, End Mount		
NOTES: 1) Some option combinations may impact UL listing. Consult factory for specifics. 2) Requires 'open-face' design.						

Dimensions

cast exit



canopy



Suggested Specification

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

INSTALLATION AND OPERATION - Exit shall be easily field connected to a 120 or 277 VAC, 60 Hz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. (Self-Powered 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.

ELECTRONICS AC-Only Models - The Unison Cast Series exit sign shall be easily field connected to 120 or 277 VAC, 60 Hz un-switched power source. The Unison Cast Series exit sign equipped with red LEDs shall consume 0.032 A with a power factor of 0.94 (120 VAC) and 0.015 A with a power factor of 0.94 (277 VAC). The Unison Cast Series exit sign equipped with green LEDs shall consume 0.035 A with a power factor of 0.92 (120 VAC) and 0.016 A with a power factor of 0.92 (277 VAC). Available, factory-installed options shall include a two-circuit module to accommodate 120/120 or 277/277 VAC for use with a generator or central inverter system; a fire alarm activated flasher option to accommodate an input from a fire alarm panel and provide a flashing rate when the alarm system is activated.

Self-Powered Models - All self-powered models shall be provided with LightGuard's Smart Charger diagnostics electronics platform. The exit sign shall be easily field connected to 120 or 277 VAC, 60 Hz un-switched power source. 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 Unison Cast Series exit sign equipped with red LEDs shall consume 0.039 A with a power factor of 0.94 (120 VAC) and 0.018 A with a power factor of 0.94 (277 VAC). The Unison Cast Series exit sign equipped with green LEDs shall consume 0.040 A with a power factor of 0.94 (120 VAC) and 0.018 A with a power factor of 0.94 (277 VAC). 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 LED load fault and notify personnel with a visual indicator sequence. Optional audible diagnostics as well as self-testing diagnostics shall be available from the factory. The self-testing option shall satisfy the periodic testing requirements in NFPA 101, Life Safety Code as well as the International Building Code (IBC). The Smart Charger circuit shall continuously sample ambient temperature conditions and adjust the charging regime to compensate for typical and dramatic ambient conditions 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 (Self-Powered Only) - The battery shall be maintenance free, sealed nickel cadmium utilizing sintered plate construction and polypropylene separators for trouble-free operation in ambient temperatures up to 104°F (40°C). Nickel cadmium batteries are supplied with a five year full and five year pro-rata warranty.

ILLUMINATION - The Unison Cast Series indirect view LED exit signs shall incorporate 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 in the emergency mode.

ENCLOSURE - The exit sign housing shall be constructed of heavy-duty die cast aluminum. The final housing finish shall be an epoxy-based powder coat paint or aluminum finish. The exit stencil face shall be constructed of the same aluminum alloy and will be completed with a brushed finish or matching paint. Chevron direction shall be field-selectable, and if left in place, will not disturb the visual line of the exit face.



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

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