



WNC-1W-SL

The WNC-1W-SL is a high-visibility, 2-gang wireless corridor dome light designed to provide immediate visual notification of active patient calls outside patient rooms, exam rooms, or staff zones. Featuring a translucent, high-impact white lens, this single-section corridor lamp illuminates brilliantly to guide responding staff directly to the source of an alert.

Equipped with an internal wireless transceiver, the WNC-1W-SL operates over a supervised 900 MHz spread-spectrum frequency. It mirrors the status of the room's bedside or bath stations automatically without needing physical data wiring back to the master console, making it perfect for rapid retrofits and clean, wire-free modern healthcare environments.

Architects and Engineers Specifications

1. General System Requirements

The contractor shall furnish and install the WNC-1W-SL 2-Gang Wireless Corridor Lamp (or approved equal) outside each patient room/station as indicated on the project drawings. The lamp must provide local visual indication of calls originating from within the assigned room and communicate wirelessly within the facility's supervised 900 MHz nurse call network framework.

2. Hardware and Visual Requirements

- **Enclosure and Backplate:** The lamp assembly shall mount to a standard standard 2-gang electrical box. The faceplate must be constructed of high-impact, flame-retardant ABS plastic (UL 94V-0 compliant).
- **Lens Assembly:** The visual indicator must feature a single-section, translucent white wedge-shaped lens designed to diffuse light uniformly. The lens must project far enough from the wall surface to provide unobstructed viewing from any angle along a 180° corridor path.
- **Light Source:** Internal lighting must consist of long-life, solid-state LEDs. Incandescent lamps are strictly prohibited due to heat and lifecycle degradation.

3. Wireless & Operational Requirements

The corridor lamp must include an onboard, FCC-certified wireless transceiver operating via frequency-hopping spread spectrum (FHSS) technology in the 902–928 MHz ISM band. The device must support bidirectional supervision, sending operational status updates to the master station at designated intervals. The device must operate on low-voltage class 2 wiring (12V to 24V AC/DC).

Product Specifications

- Model Number: WNC-1W-SL
- Form Factor / Mounting: 2-Gang Flush or Surface Mount Backbox
- Lens Configuration: 1-Section, Translucent White Wedge
- Illumination Source: High-Intensity, Solid-State Surface Mount LEDs
- RF Operating Frequency: 902–928 MHz Frequency-Hopping Spread Spectrum (FHSS)
- Operating Voltage Input: 12V to 24V AC or DC (Class 2 Low-Voltage Power Supply)
- Current Consumption: 50 mA (nominal at peak illumination)
- Dimensions (H × W × D): Approximately 4.5" × 4.5" × 2.75" (including lens depth)
- Faceplate Material: Flame-Retardant ABS Plastic (White/Off-White Finish)
- Operating Environment: 32°F to 120°F (0°C to 49°C); 5% to 95% Relative Humidity, Non-Condensing

Equipment Options

The WNC-1W-SL belongs to a modular corridor indication family. Optional configurations and pairing accessories include:

- **WNC-2W-SL / WNC-3W-SL:** Multi-section dome lamps (2 or 3 sections) with colored lenses (e.g., Red, Amber, Green) for multi-status prioritization (Emergency, Bath, Normal Call).
- **WNC-1W-SL-C:** Ceiling-mount variant for complex hallway configurations where wall visibility is obstructed.
- **Backbox Extensions:** Custom surface-mount shallow raceway rings for installations over solid concrete walls where flush 2-gang boxes cannot be recessed.

Standard Features

- **Solid-State LED Illumination:** Utilizes high-efficiency, long-life LEDs that run cool, eliminate bulb replacement cycles, and maximize power efficiency.
- **Diffused Translucent White Wedge Lens:** Specially angled wedge shape provides 180° visibility down long hallways from either direction, eliminating blind spots.
- **Flame-Retardant Faceplate:** Built on a durable, impact-resistant ABS plastic faceplate designed to fit standard 2-gang electrical backboxes.
- **Flexible Power Modes:** Designed to run efficiently on low-voltage AC or DC power infrastructure typically found in healthcare facilities (12V to 24V).
- **Cross-Talk Prevention:** Employs advanced address pairing to prevent adjacent room signals from overlapping or misfiring.

Compliance and Certification

The WNC-1W-SL meets rigorous North American healthcare safety and regulatory standards:

- **UL1069 Listed (Edition 7):** Certified for use in Hospital Signaling and Nurse Call Equipment when integrated into a UL1069-compliant emergency communication system.
- **UL2560 Listed:** Meets safety protocols for emergency call systems in assisted living, independent living, and continuous care retirement communities (CCRC).
- **FCC Part 15 Certification:** Approved as an intentional radiator under FCC Part 15 rules. The 900 MHz spread-spectrum output will not interfere with sensitive clinical equipment like telemetry, Wi-Fi networks, or cellular bands.
- **RoHS Compliant:** Fully manufactured without lead, mercury, hexavalent chromium, or polybrominated biphenyls, meeting strict environmental safety mandates for healthcare infrastructure.

More Features

- **Fail-Safe Visual Mirroring:** Connects directly with the local patient station via a low-voltage dry-contact link or RF handshake, ensuring that if the central master station experiences downtime, the room-specific corridor light continues to illuminate locally when a button is pressed.
- **Supervised RF Pulse:** Transmits periodic check-in telemetry to the central console. If a dome light loses power or drops off the network, the master console reports a "Station Missing" fault within minutes.
- **No-Tool Lens Removal:** The translucent snap-on wedge lens can be serviced or cleaned without removing mounting screws, lowering long-term maintenance costs.