# Product Specification Sheet
WNC-RP-WP
Wireless Outdoor Repeater



## WNC-RP-WP
## WIRELESS OUTDOOR REPEATER

The WNC-RP-WP Wireless Outdoor Repeater is a high-performance signal-amplification infrastructure component designed for advanced wireless nurse call systems. Operating on a 900MHz frequency-hopping spread spectrum network, the unit is engineered to accept, decipher, filter, and re-transmit alarm telemetry originating from any compatible wireless patient station, pendant, or peripheral component. Housed in a ruggedized, fully sealed weatherproof enclosure, the WNC-RP-WP bridges long-distance communication gaps across campus-style healthcare layouts, outdoor courtyards, parking areas, and detached rehabilitation facilities. It ensures structural signal path redundancy back to the central master receiver console.

## Specifications

- Operating Frequency: 900MHz Spread Spectrum (Frequency Hopping)
- • Enclosure Rating: Weatherproof IP65 / NEMA 4X equivalent structural seal
- • Primary Input Power: 12V DC to 14V AC utilizing supplied step-down transformer
- • Backup Battery Supply: Integrated sealed rechargeable cells (Up to 3 hours capacity)
- • Transmission Range: Up to 1,000 feet nominal line-of-sight (Extended by environment)
- • Housing Composition: High-impact, UV-stabilized polycarbonate engineering resin

## Equipment Options

The WNC-RP-WP can be specified with alternate antenna configurations or companion system variants depending on campus architectural demands:

- WNC-RP-WP-EXT: Version featuring an external N-Type connection port for high-gain directional or omni-directional outdoor mast antennas to target specific structural blind spots.
- WNC-RP-WP-MC: Pole/Mast mounting collar kit constructed of marine-grade stainless steel for secure exterior installation on utility poles or architectural pillars.
- Alternative Base-Model Variants: WNC-RP: Standard indoor wireless repeater assembly.
- WNC-RP-UL1069: Dedicated acute-care indoor repeater housing integrated network switch logic.

## Architects' and Engineers' Specifications

**1.0 Outdoor RF Signal Repeater Equipment Requirements**

A. The contractor shall furnish and install the Wireless Outdoor Repeater, Model WNC-RP-WP, at locations indicated on the exterior site plan layout. The device shall function as a self-contained, fully automated RF transceiver operating on a 900MHz frequency-hopped spread spectrum bandwidth.

B. The repeater shall receive, error-check, and re-transmit signals from any compatible system call station or mobile pendant without adding perceptible latency to the host central monitoring console.

C. The device assembly must be completely sealed against moisture, dust, and environmental contamination within a weatherproof housing. It shall be rated for direct, unshaded exterior mounting on building facades or structural columns.

D. The unit shall incorporate an un-switched AC power transformer source and include internal, self-managing backup batteries capable of sustaining normal operating power for no fewer than three (3) hours during a secondary electrical infrastructure failure.

Toll-Free: 888.556.3998
Phone: 716.689.0871
Address: 5225 SHERIDAN DR STE 110,
GEORGETOWN SQUARE, WILLIAMSVILLE NY 14221-4952
E-mail: support@becsolutionsllc.com

# Product Specification Sheet

WNC-RP-WP

Wireless Outdoor Repeater

## Standard & Advanced Features

900MHz Spread Spectrum Technology: Utilizes robust frequency-hopping logic to effectively bypass environmental interference and maximize building-penetration capabilities.

- Weatherproof NEMA-Rated Shielding: Sealed enclosure protects sensitive internal RF circuitry against heavy rain, high humidity, blowing dust, and extreme temperature shifts.
- Integral Backup Power Matrix: Equipped with an on-board rechargeable battery backup system supplying up to 3 hours of continuous routing operations during structural mains power outages.
- Dynamic Signal Cleaning: Actively decodes incoming packets and regenerates the signal at full transmission power, mitigating signal degradation over vast distances.
- Seamless Receiver Lineage Compatibility: Natively pairs with MV 200Z, 200Plus, 400Z, 500Z, and PC-Based Wireless Nurse Call Master Console Receivers.

## Compliance and Certification

The WNC-RP-WP conforms to standard legal and regulatory mandates for continuous broadcast medical network infrastructure:

- FCC Part 15 Certified: Registered and approved under Federal Communications Commission industrial guidelines to guarantee non-interfering transmission paths alongside sensitive life-safety instrumentation.
- UL 1069 Component Matrix Integration: Designed to operate as a structural signal-bridging accessory within broader UL 1069 listed wireless emergency call layouts.
- RoHS Compliant: Built without lead, hexavalent chromium, mercury, polybrominated biphenyls, or related hazardous manufacturing compounds.

Toll-Free: 888.556.3998
Phone: 716.689.0871
Address: 5225 SHERIDAN DR STE 110,
GEORGETOWN SQUARE, WILLIAMSVILLE NY 14221-4952
E-mail: support@becsolutionsllc.com