



### Architects and Engineers Specifications

The central processing equipment shall be a high-availability, continuous-duty platform designated as the Wireless WNC-SERVERSV Mid-Tower Server. The system architecture must support localized, standalone operation independent of external cloud networks to ensure uninterrupted facility operations during network outages.

The server shall feature a dedicated database engine capable of real-time event logging, historical tracking, and multi-tier notification routing rules. The physical enclosure shall be a standard mid-tower chassis constructed with industrial-grade cooling fans, an active power correction unit, and legacy compliance interfaces to communicate with local wireless receivers and transceivers.

Any system failing to provide isolated database logic or local hardware telemetry integration shall not be considered equal.

### WNC-SERVERSV

The Wireless WNC-SERVERSV Mid-Tower Server (SKU: WNC-SERVERSV) serves as the central processing engine and primary head-end platform for wireless nurse call and localized emergency communication infrastructure. Engineered specifically for 24/7/365 continuous duty cycle operation in healthcare, senior living, and commercial safety environments, this server aggregates incoming alarm triggers, manages database logic, and routes real-time event notifications to designated responder devices. Housed in a robust, high-thermal-efficiency mid-tower chassis, it bridges the gap between hardware terminal endpoints and facility management software, ensuring reliable, low-latency system synchronization.

### Product Specifications

- **Product Name:** Wireless WNC-SERVERSV Mid-Tower Server
- **SKU:** WNC-SERVERSV
- **Form Factor:** Industrial Mid-Tower Enclosure
- **Operating System:** Optimized Embedded Linux / Windows Server Environment
- **Database Support:** Secure, Relational SQL-Based Real-Time Database Engine
- **Input Voltage:** 100–240 VAC, 50/60 Hz, Auto-Sensing
- **Data Interfaces:** Dual Gigabit Ethernet (RJ-45), Dedicated Serial Ports (RS-232), USB 3.0/2.0 Ports
- **Cooling System:** Dual High-CFM Internal Cooling Fans with Dust Filtration
- **Mounting Configuration:** Desktop / Shelf Placement or Secured Server Cabinet Housing

### System Components

The WNC-SERVERSV server is designed to seamlessly integrate into a broader wireless nurse call infrastructure, operating alongside the following fundamental system components:

- **Central Master Station Software:** Pre-loaded system software governing event assignments, visual call consoles, reporting analytics, and administration.
- **Wireless Receivers/Transceivers:** External network hubs that capture RF transmissions from patient devices and forward them to the server via network or serial connection.
- **Patient & Staff Transmitters:** Compatible wireless endpoints including emergency pull-cords, bedside call pendants, universal door transmitters, and staff duress buttons.
- **Output Notification Appliances:** Output routing nodes managed by the server, such as physical dome lights, LED corridor zone displays, pocket pagers, and mobile client applications.

## Features and Benefits

- **High Reliability Architecture:** Built using industrial-grade internal components engineered for constant data logging and event processing with minimal downtime.
- **Scalable Notification Logic:** Features customizable escalation rules, allowing unanswered calls to automatically route to secondary or tertiary personnel groups.
- **Comprehensive Historical Logging:** Maintains a permanent archive of all system events, response times, and staff acknowledgments for liability tracking and compliance reporting.
- **Efficient Heat Dissipation:** The mid-tower chassis utilizes optimized airflow dynamics and quiet, heavy-duty cooling fans to maintain safe internal temperatures in active data closets.
- **Local Network Independence:** Operates completely on a local area network (LAN) basis, insulating critical patient signaling from external internet outages or cyber threats.

## Compliance and Certification

The WNC-SERVERSV platform is designed and evaluated to meet stringent commercial safety and interference standards required for mission-critical environment deployments:

- **FCC Part 15 Class B:** Certified for low electromagnetic interference (EMI) limits, safeguarding surrounding sensitive clinical or communication hardware from radio frequency disruptions.
- **CE Compliance:** Meets essential European health, safety, and environmental protection standards for electronic data processing apparatus.
- **RoHS Compliant:** Manufactured entirely without hazardous substances (such as lead, mercury, and cadmium) to meet modern environmental material mandates.