ALERiTY integrated MNS solutions

Mass notification

The right message to the right people at the right time

EATON
Powering Business Worldwide
Provides unmatched reliability, interoperability and ease of use for organizations seeking the utmost in emergency communications technology

From catastrophic natural disasters to the threats college students face, there has been a heightened demand for integrated, multi-layered Mass Notification Systems (MNS) to protect, alert and inform people in an emergency. That’s why our MNS are the perfect solution for delivering critical alerts when it matters most.

Whether informing an entire campus of a natural disaster or evacuating a single building due to a HAZMAT accident, the ALERiTY MNS platform integrates wide-area and in-building MNS for one networked solution.

Distributed over a Local Area Network (LAN), Eaton’s IP-based MNS solutions allow organizations to leverage existing infrastructure without adding unnecessary costs. Supporting the highest standards of network security, WAVES, part of the ALERiTY platform, features both wired and wireless solutions so that the delivery method to all indoor and outdoor notification devices can be agnostic.

**Key differences**

- End-to-end IP communications network for site-wide mass notification
- Easy-to-use, one-click solution
- Remote access to activate messages and monitor the system
- Unified interoperable MNS platform that integrates with other life safety systems
- Fully redundant client-server architecture with multiple points of command and control
- Standby Server available to keep your system up and running for critical communications
- Meets stringent life safety requirements, including seamless system recovery and system supervision

From the battlefield to college campuses, Eaton’s ALERiTY solutions provide critical audible and visual messages that are specific to the emergency, specific to the area affected, and in real time.
The key to effectively responding to emergencies is an integrated System of Systems solution. From an outdoor Giant Voice system to interior speakers, multiple channels of communications ensure that information will successfully reach the affected audience. With limited staff and multiple systems to activate, you need Eaton’s integrated MNS with a simplified, single interface to launch all of the different applications on a common IP network. It allows facility managers and emergency response personnel to focus on the emergency at hand without being slowed down trying to activate numerous systems.

When immediate notification is essential, Eaton’s reliable and integrated MNS solutions allow emergency officials to send alerts and potentially life-saving instructions to unlimited communication devices—all from one Graphical User Interface (GUI).

- In-building MNS
  - Central control systems
  - Autonomous control units
  - Audible/visual notification appliances

- Wide-area MNS
  - Central control systems
  - High power speaker arrays
  - Integrated speaker units
  - Horn loudspeakers
  - Mobile and portable systems
  - Strobes

**Situational awareness**

Knowledge is critical in effectively responding to an emergency situation. The more knowledge one has about a situation, the better he or she can manage the crisis. Situational awareness is the state of knowledge of the event, what is happening around that event, and the anticipated risks. Decisions made from this knowledge define the present and future state of the emergency. Greatly improving situational awareness enables operators to make more informed decisions when time is of the essence.

**Life safety & security system integration**

Through IP-based technology and advanced programming interfaces, the ALERiTY solution integrates disparate communication and life safety systems for complete, accurate and up-to-the-minute situational awareness, including:

- Fire alarm control panels
- Paging systems
- Public address systems
- Bollards
- Gates
- LED display signs
- Access control systems
- Sensors
- Detection systems
- Distributed recipient MNS

Improve situational awareness and system management helps save lives and reduce chaos in an emergency.
Integrated wired & wireless solutions for site-wide emergency communications

Local Area Network (LAN) wired solution

- Integrated Base Station (IBS) + WAVES software
- IP Communicator (IPC2)
- High Power Speaker Array – HPSA-8120-R Series, includes IPC2
- Autonomous Control Unit – ACU-8421, includes SP40S and IPC-8020
- Master Radio – IPC2 and Radio
- Wireless Radio

Wireless communications
- Parking garage, not part of the LAN
- Tailgating and stadium parking—2 miles away from LAN

Wireless IP communications
- Remote campus—3 miles away from LAN
- Local Area Network (LAN) wired solution
- Remote campus—2 miles away from LAN
- Fire Alarm Control Panel
Communications agnostic

Wired & wireless IP communications

Communications networks

The WAVES Mass Notification System is comprised of a collection of secure, robust and reliable Ethernet communication devices, IP Communicators (IPC2). Wired directly to a LAN or through its own private network, the IPC sends audible, visual and data messages via an RTP multicast stream. For wireless communications, Eaton approved radios can be added to the system.

Wide-area MNS

WAVES High Power Speaker Arrays (HPSA-8100-R series) broadcast intelligible voice messages and tones, covering large geographic areas. This outdoor Wide-area MNS features industry-leading intelligibility using advanced amplification system design. HPSA components include 2 to 8 horn and driver configurations, and an electronics cabinet, which includes the IP Communicator and 65AH batteries. Eaton approved radios can also be added for wireless communications. Integrated Loud Speaker Units (ISU-8121) units are also available for outdoor areas.

Leading intelligibility

• HPSA’s vertical line arrays focus sound at audiences
• Equalized intelligibility—broadcast messages as clearly at 2000’ as at 100’

Higher efficiency

• Class D amplification technology and better power management
• HPSA amplifier is more than 90% efficient with lower current draw, improved battery standby time and increased battery life

In-building voice evacuation

Autonomous Control Unit (ACU-8421) provides supervised emergency voice communications with multi-use capabilities, including paging, background music, and voice messaging. It can be integrated with FACPs and telephone systems. Components of the ACU-8421 include the SAFEPATH SP40S and IPC-8020. Eaton approved radios can be added for wireless communications. 24 VDC battery backup.

• Mute music & announcements during emergency
• Remote microphone & local operator console available
• Prioritize messages for predetermined needs; custom messages available
• Monitor the system operation 24/7/365
• Fully supervised: 2 amps of supervised 24 VDC strobe power per circuit; Supervised NAC and audio circuits; On-board diagnostics & trouble reporting circuits

“The right message to the right people at the right time

The ALERiTY difference

End-to-end IP solutions for campus-wide communications

Central control system

With an intuitive easy-to-use interface, the WAVES Integrated Base Station (IBS-8400 product line) is an advanced configurable control system that issues voice and visual messages and monitors the status of all peripheral devices.

Components of the IBS include the WAVES computer, IP Communicator (IPC2), microphone with all-call switch, keyboard, mouse, and an Uninterruptible Power Supply. WAVES software and hard drive (WAVES-HD-8000 product line) are also required to operate the IBS.

• One click solution to launch indoor and outdoor mass notification systems
• Fully redundant MNS solution with multiple points of command & control through web-client GUI
• Standby Server available to keep your system up and running for critical communications
• Supervision and monitoring of the end nodes assures that messages are received as sent
• Interactive map with geographic unit selection and color-coded status of each node in the IP network and its EOLD (speaker arrays, strobes, display signs)
• Pre-recorded or live (PTT noise-cancelling microphone) messages to any individual or group of audible devices
• Interoperability with other life safety and security systems
• Supports network security standards and encryption—AES 256 bit
• Dynamic role-based password protection; multiple user roles and privileges
• Fully customizable in the field: GUI; library of pre-recorded messages; script creation and prioritization of sequential actions such as playing audio, controlling digital outputs, controlling text displays, activating strobes
• Remotely access the system to activate messages
• Remotely monitoring reports indicate off normal conditions prior to dispatching service personnel
• Remotely upload upgrades from main server to IP and radios
• For a hybrid system, the IBS-0300 series and WAVES-HD-8000 series can support both IP-based and existing WAVES 2.4 GHz systems with the addition of an IPC-8001

The right message to the right people at the right time

“Relying on just one method of communications in an emergency could result in a relatively large portion of the targeted population not receiving the message.”

NFPA 72 National Fire Alarm and Signaling Code
Intelligible communications

With the widest frequency response range available, Eaton’s speakers provide crisp, clear voice messages

Clear, concise and intelligible voice messages that communicate how people should respond in an emergency are critical for life safety. At Eaton, we understand that you need a solution that not only meets your organization’s intelligibility and reliability requirements but also provides overall system cost savings. From Wheelock high fidelity speakers and speaker strobes for in-building emergency communications to WAVES High Power Speaker Arrays and Mobile Speaker Arrays for wide-area mass notification, Eaton provides a variety of audible and visual options to meet your organization’s needs.

“The wider frequency response allows speakers to reproduce frequencies closer to the original sound, improving the clarity and comprehension of the intended message.”

National Fire Protection Association NFPA 72

Eaton

Trusted and reliable MNS solutions

Technological leadership

Providing a century of experience and innovation, Eaton is the industry’s foremost developer in advanced technological solutions for the rapidly growing mass notification market, where intelligible, reliable and redundant communications are paramount for responding to threats.

Multi-use applications

From Afghanistan to the National Capitol Region, Eaton has helped emergency managers and security professionals in more than 500 MNS installations worldwide deliver critical alerts when it matters most. Eaton’s MNS are successfully providing emergency communications for all types of threats and disasters in various types of occupancies. The systems can also be used for general announcements, crowd control and special events.

- Healthcare facilities
- Industrial facilities
- Municipalities
- Public venues
- Energy, oil and gas markets
- Educational facilities
- Corporate campuses
- Government buildings
- Military sites
- Mass transit hubs
- Healthcare facilities
- Industrial facilities
- Municipalities
- Public venues
- Energy, oil and gas markets

Service & Support

Eaton’s highly skilled service and support teams fully embrace the significance of ALERiTY as a life safety system, understanding that any downtime is too long. To help reduce stress in a crisis, Eaton’s experienced professionals are available to offer technology solutions, help troubleshoot issues, and assist with maintenance activities to enable your Mass Notification System to operate at optimal performance levels.

Proven reputation

As a premier provider to the federal government, Eaton’s advanced MNS solutions are battle-tested and battle-proven every day by protecting our armed forces in the most demanding environments and circumstances. ALERiTY integrated mass notification solutions are available today to instantly inform people of exactly what to do and where to go with clear, intelligible and timely communications.

When public safety is at risk, why would you rely on anything less?