

# RADIO COMMUNICATIONS



## Bi-Directional Amplifier (BDA) Solutions

### Reliable Two-Way Emergency Radio Communication



Emergency Responders lose communications when radio signals in-building are weakened by structures such as concrete, windows, and metal. Staying informed with clear radio transmissions between first responders inside of a building and emergency personnel outside of the building can help prevent injuries and save lives.

NOTIFIER's Bi-Directional Amplifier (BDA) System is a signal boosting solution designed to enhance in-building radio frequency (RF) signal coverage for public safety radio. When combined with industry leading fire systems, NOTIFIER provides the reliability and quality expected from a life safety solution.

#### Reliable Performance

Specifically designed to meet UL2524 In-building 2-Way Emergency Radio Communication Enhancement Systems, NOTIFIER's Class B, Bi-Directional Amplifier Solutions provide a high power, band-selective radio signal booster system that can be designed and customized to meet all public safety frequency band ranges. This state of the art BDA System is developed to provide a high rejection of interfering signals, and is designed for excellent heat dissipation, corrosion resistance and ease of wall-mounting.

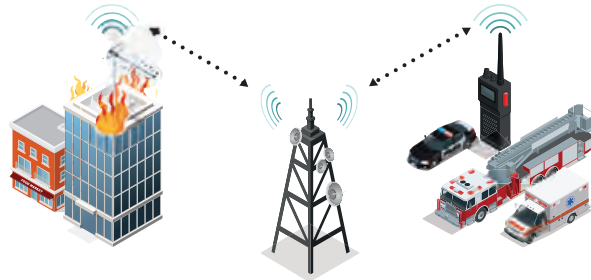


#### Features and Benefits

- > UL2524 for In-building 2-Way Emergency Radio Communication Enhancement Systems listing, CSFM listing
- > NFPA 72 2010 Edition, NFPA 1221 2016 Edition and IFC 2018 compliant
- > Supports all US public safety frequency bands
- > Directly integrates with NOTIFIER Fire Alarm Control Panel
- > Single BDA to cover multiple sub-bands with a wider bandpass
- > Automatic and self adjusting oscillation prevention and uplink squelch support
- > Lower power consumption for long term reliability and efficiency

## IS YOUR BUILDING IN THE EMERGENCY COMMUNICATIONS DEAD ZONE?

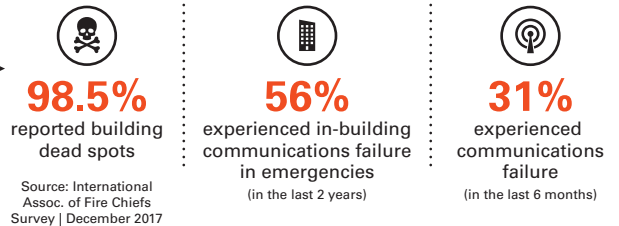
First Responders depend on reliable two-way communications when lives and property are at risk.



### SIGNAL STRENGTH IS IMPAIRED BY:

- RF interference
- Low-E glass windows
- Underground structures
- Obstructions
- Building materials

### FIRST RESPONDER COMMUNICATION ISSUES



## 100% RELIABLE COMMUNICATION

### The Coverage Problem

Public Safety Radio Repeater

Good Coverage

Poor Coverage

Radio signal strength within a building is relative to the locality's public safety radio repeater antenna. Depending on the location and orientation of the building, signal strength may vary. Radio signal strength in-building is also weakened by structures such as concrete, metal, low-E glass, below ground structures, etc.

### The BDA Solution

Donor Antenna

Bi-Directional Amplifier (BDA)

Power Divider/ Couplers

DAS Antenna

Fire Alarm Control Panel

Annunciator Panel

Emergency Radio Communication Enhancement system provides complete in-building coverage by boosting signals from the radio repeater with a Bi-Directional Amplifier (BDA) and distributing it throughout the building using DAS.

It also ensures reliable two-way communications, receiving and amplifying transmissions from radios inside to the repeater antenna outside.