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# BDA/ERCES System Components Guide

A quick reference to the major components commonly used in emergency responder communication enhancement systems.

## Typical BDA/ERCES Components

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|---|---|
| **Donor Antenna** | Typically mounted outdoors or on a rooftop. It receives the public-safety radio signal serving the jurisdiction. |
| **BDA (Bi-Directional Amplifier)** | Receives the donor signal, amplifies it, and rebroadcasts it to improve in-building radio coverage. A BDA is only one part of the complete ERCES. |
| **Distributed Antenna System (DAS)** | A network of interior antennas and cabling that distributes radio coverage throughout required building areas. |
| **Coaxial Cable & Pathways** | Connects system components. Routing, protection, survivability, and installation details depend on applicable requirements. |
| **Backup Power** | Keeps critical system functions operating during a loss of normal building power for the duration required by applicable codes and the AHJ. |
| **Monitoring / Supervision** | Provides required system status, trouble, or supervisory indications. The specific monitoring arrangement depends on the project and local requirements. |
| **Fire Alarm Interface** | Some projects require signals from the ERCES/BDA system to be supervised or annunciated through the building fire alarm system. |
| **Enclosures & Supporting Equipment** | Equipment cabinets, power supplies, surge protection, grounding/bonding, and other supporting components are selected for the approved system design. |

i **System configuration varies by building, radio system, adopted codes, and the AHJ. Innovative Security Solutions will confirm project requirements before final design and permitting.**

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