

# POTTER | ERCES



## GUARDIAN SERIES

Public Safety Band Signal Amplifiers  
and Design Solutions

# Empowering Emergency Communication Where it Matters Most

In the critical moments of an emergency, seamless communication saves lives. That's why Potter ERCES delivers advanced solutions to ensure emergency responders stay connected, even in the most challenging environments.

Emergency Responder Communications Enhancement Systems (ERCES) include a suite of technologies designed to strengthen communication for emergency responders such as firefighters, police, and medical personnel. These solutions are critical for effective coordination and real-time updates, particularly in hard-to-reach areas like basements, stairwells, and parking garages.



## Bi-Directional Amplifiers (BDA):

Boost and amplify communication signals in areas with weak reception. Our BDAs use high-gain antennas to receive signals, amplify them, and rebroadcast the improved signals throughout the building.



## Emergency Wireless Communication (EWC):

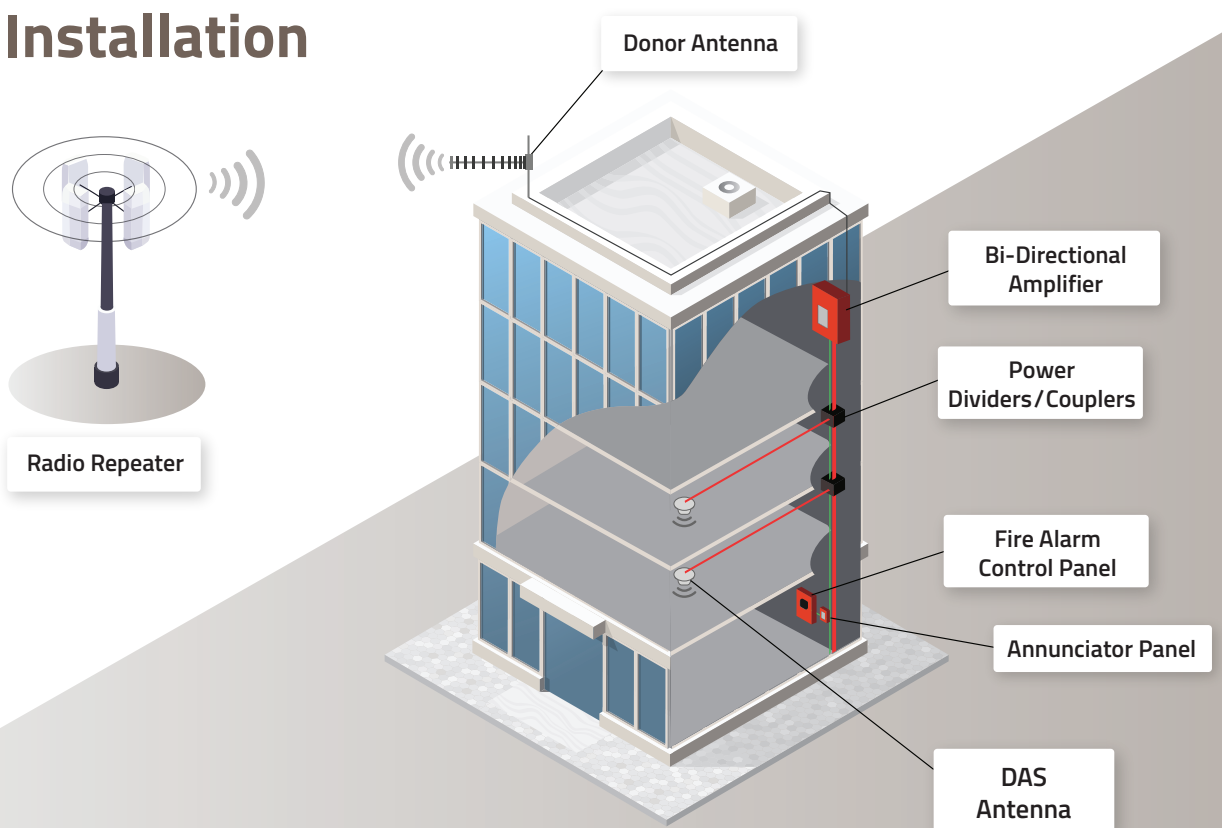
A comprehensive approach to emergency communication, encompassing handheld portable radios, BDAs and DAS networks, to keep first responders connected.



## Distributed Antenna Systems (DAS):

A strategic network of antennas placed throughout a building, connected to a common source via transport mediums such as fiber-optic and COAX Cable. This setup ensures robust signal distribution in every corner of the facility.

## Typical Installation



# Maximize Efficiency. Differentiate Your Business. Secure Recurring Revenue.

At the core of Potter ERCES is the Guardian BDA—engineered for reliable, code-compliant coverage and simplified installation. Paired with our expert-led Guardian Design Solutions, this combination supports your success from initial design through final approval. Whether you're submitting plans or completing installations, Guardian BDA and Guardian Design Solutions help you deliver dependable signal—clearly and confidently.

## Why Choose Guardian BDAs?

Gain a competitive edge with a streamlined approach that reduces complexity and enhances profitability. By integrating Potter ERCES with your fire alarm services, you unlock new opportunities for efficiency, customer retention and long-term revenue growth.

- ✓ Simplify Project Management: Reduce the number of subcontractors needed, giving general contractors greater control and efficiency in project execution.
- ✓ Comprehensive Service Offering: Combine annual BDA and fire alarm inspection, testing and maintenance into a seamless package, making it more convenient for building owners while increasing customer retention.
- ✓ Stand Out from the Competition: Potter ERCES offers a complete, code-compliant life safety solution that enhances your market position and differentiates your services.



## Recurring Revenue Opportunities

Potter ERCES solutions ensure ongoing business opportunities through required maintenance and compliance testing:

- ✓ Annual NFPA Required Inspection and Testing:
  - Battery Backup Unit (BBU) performance verification.
  - Bi-Directional Amplifier (BDA) panel output power and donor incoming signal strength testing.
- ✓ Five-Year System Recertification:
  - Full system evaluation including alarm trigger functionality, grid testing, and retransmission agreement renewal.
- ✓ Added central station monitoring may be required for BDA trouble and supervisory conditions.



With Potter ERCES, you don't just install a system—you build a lasting service relationship with your customers while ensuring compliance and life safety.

# Guardian Design Solution at a Glance

## The Industry's Most Complete BDA Project Support

When you're competing for BDA projects, speed, accuracy, and confidence win the job. Guardian Design Solutions gives you unmatched pre- and post-sale support that turns complex ERCES projects into profitable, repeatable successes.

## What You Get with Guardian Design Solutions

### ✓ Comprehensive Pre-Sale Services

Eliminate budget guesswork with detailed estimates covering both pre- and post-construction costs—aligned with local AHJ requirements from the start.

### ✓ Seamless, Tailored Process

Submit your project parameters and our ERCES Design Team delivers a complete, ready-to-bid package that helps you secure projects with confidence.

### ✓ Post-Sale Services That Deliver

Ensure every project is completed on time and on budget with built-in technical support and optional service packages customized to your client or project needs.

### ✓ Built-In Competitive Advantage

By leveraging our design capabilities, you deliver solutions that not only meet today's code demands but also position your business as the go-to ERCES expert.



## Why Guardian Design Solutions?

No other BDA provider delivers the same level of design expertise, bid-ready packages, and post-sale project support. Guardian Design Solutions is more than a service—it's your competitive edge in winning projects, retaining customers, and outperforming the competition.

When the stakes are high, choose the team that helps you design success into every project.

**GET STARTED WITH  
GUARDIAN DESIGN  
SOLUTIONS BY VISITING:**



**VIEW OUR UPCOMING LIVE TRAINING AND WEBINARS**

**PTTR.US/DESIGN**



**PTTR.US/ERCES**



# Seamless ERCES Installation: A Step-by-Step Guide

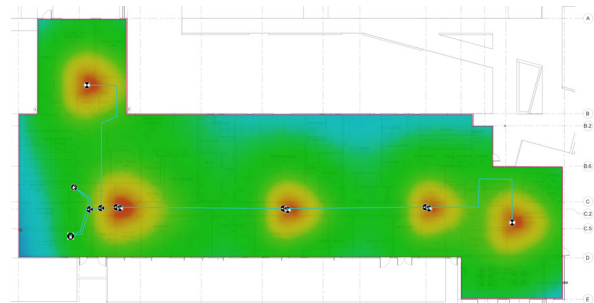
## Ensuring Reliable Emergency Communication with Guardian Design Solutions

Implementing an Emergency Responder Communication Enhancement System (ERCES) requires careful planning and precision. By following a structured approach, you can streamline the process, mitigate challenges, and ensure compliance with all regulatory requirements. Guardian Design Solutions is here to guide you every step of the way, making installation efficient and hassle-free.

### ① Phase 1: Pre-Construction Planning & Site Assessment

#### Laying the Foundation for a Successful Installation

Guardian Design Solutions 3rd Party Integrators may begin with a thorough on-site assessment using advanced testing equipment to determine the exact areas where signal enhancement is needed. This strategic approach optimizes performance while saving costs by avoiding unnecessary equipment installations.



Example Heat Map

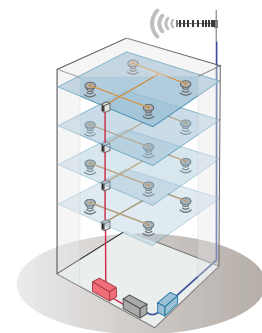
- **Regulatory Expertise & Compliance:** Navigating NFPA and AHJ (Authority Having Jurisdiction) requirements can be challenging. Our team offers expert guidance to ensure seamless approval processes.
- **Pre-Installation Grid Testing:** Services are available via our 3rd party integrators to conduct an in-depth site evaluation, identify critical coverage gaps, determine the best head-end location, and map 2-hour rated pathways for external donor antennas.
- **DAS Discovery & Feasibility Study:** By proactively identifying potential design challenges, we minimize surprises during the later installation phases, ensuring a smooth approval process.

### ② Phase 2: System Design & Post-Construction Execution

#### Bringing the Blueprint to Life

Once site assessments and pre-construction testing are complete, Guardian Design Solutions crafts a comprehensive system blueprint using industry-leading iBwave software. This ensures:

- **Precision in Design:** Every aspect of the system is mapped out, including antenna placement, cable routing, and signal distribution to maximize performance and compliance.
- **Installation & Commissioning:** Proper system setup is crucial to avoid interference with macro networks, which could otherwise disrupt first responder communication. Our expertise ensures correct attenuation, preventing harmful signal feedback into public safety radio systems.
- **Post-Construction Grid Testing:** The final step involves rigorous testing to verify optimal system functionality. Our goal is to achieve full compliance with a grid test demonstrating reliable coverage across all designated areas, ensuring approval from the AHJ.



# Guardian Series

Potter ERCES's Guardian series are bi-directional signal amplifiers, amplifying multiple Public Safety frequency bands and enhancing in-building two-way radio communication for first responders.



## Guardian A

Potter ERCES's GuardianA Public Safety Band signal amplifier enhances in-building coverage for crucial communications, delivering consistent signal for First Responders and other public safety officials who rely on two-way radio communication inside large buildings.

GuardianA is a Class A, 2 Watt, bi-directional amplifier with a maximum gain of 90 dB supporting both the 700 and 800 MHz Public Safety frequency bands.

- UL2524 Listed
- Part No. 3996113



## Guardian B

Potter ERCES's GuardianB Public Safety Band signal amplifier amplifies both 700 and 800 MHz bands as well as FirstNet for full coverage of the Public Safety frequencies.

The GuardianB is a Class B bi-directional amplifier available as either a .5 Watt or 2 Watt version. The maximum gain of the .5 Watt and 2 Watt version is 80 dB. Both bi-directional amplifiers support the 700 and 800 MHz Public Safety frequency bands including FirstNet.

- UL2524 Listed
- Part No. 2W: 3996127 1/2W: 3996134



## Guardian UHF

Potter ERCES's Guardian UHF Public Safety Band signal amplifier enhances in-building coverage for crucial communications, delivering a consistent, high-quality signal for First Responders and other public safety officials who rely on two-way radio communication inside large buildings.

The Guardian UHF Class A, channelized 2.5W and 5W bi-directional amplifier has a maximum gain of 90 dB and supports 450-512 MHz Public Safety frequency bands

- UL2524 Listed
- Contact us to help determine the appropriate Part#, as this is a custom unit



## Guardian QR700

Potter ERCES's Guardian QR700 Canada Public Safety Band signal amplifier enhances in-building coverage for crucial communications, delivering consistent signal for First Responders and other public safety officials who rely on two-way radio communication inside large buildings.

The QR700 is a Class B bi-directional amplifier that services the growing Public Safety 700 MHz bands for Canada. The Guardian QR700 meets Chapter 24 of NFPA 72 standards, improving weak First Responder signals for critical and non-critical areas within the building.

- Part No. 3996126

# Accessories

With a broad range of components and accessories, Potter ERCES provides everything you need for a successful installation. We offer multiple types of cabling, connectors, and tools for any type of typical setup. Software solutions also allow you to directly configure your system.



## ANNUNCIATOR

- Alarm trigger display for both BBU and BDA
- UL2524 Listed
- Part No. 3996116



## GUARDIAN BATTERY BACKUP UNIT

**In-building power and battery backup solution**

- 24hr back up power for both Class A and B BDAs
- UL2524 Listed
- Part No. 10A: 3996203, 20A: 3996204



## PCTEL IBFLEX

**All-in-one site survey and commissioning tool.**

- Includes tablet, scanner and software.
- Part No. 3997001



## SENTRY SOFTWARE

- BDA Digital Configuration and Channel Activation

## All The Connectors, Cables, and Antennas Needed To Complete Your System



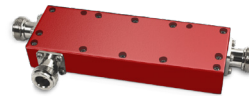
## ALL-IN-ONE CABLE PREP TOOL

- Drill attachment that easily prepares cable for connectors
- Part No. 3996131



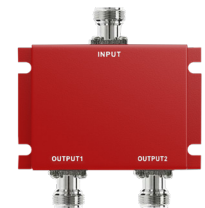
## CABLE CONNECTOR AIR DIELECTRIC CABLE

- N Male connector for 1/2" dielectric coaxial cable
- Part No. 3996130



## DIRECTIONAL COUPLER

- Allows for multiple broadcast antennas
- Part No. 6dB: 3996028, 10dB: 3996029



## WIDE BAND SPLITTER

- Wide Band 698-2700Mhz
- Part No. 2-Way: 3996025, 3-Way: 3996026, 4-Way: 3996027



## 1/2" PLENUM COAXIAL CABLE

- Ultra-low loss air dielectric coaxial cable
- Part No. 3996168



## MULTI BAND DOME ANTENNA

- Ceiling mounted omni-directional broadcast antenna
- Part No. 3996045



## PREMIUM LOW-PROFILE ANTENNA

- Premium ceiling mounted omni-directional broadcast antenna with metal
- Part No. 3996140



## DIRECTIONAL DONOR ANTENNA

- Outdoor directional 8 dBi gain donor antenna
- Part No. 3996048



## Why Choose Guardian BDAs?

### Your Trusted Partner in ERCES Implementation

Integrating an ERCES system into your project doesn't have to be complex; Guardian Design Solutions simplifies the process. Our expertise not only streamlines installations but also accelerates the approval process, helping buildings secure their Certificate of Occupancy and avoiding unnecessary setbacks. With Guardian Design Solutions, you'll have confidence in delivering Signal Where It Matters.

### Let's Get Started - Contact Us Today!

 800-325-3936

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 [www.pottersignal.com/ERCES](http://www.pottersignal.com/ERCES)

