

# SHIELD EXTEND

## ERCES Public Safety DAS



Performance Leadership



Ease of Install



End-to-End Monitoring



Talk-Out & Grid Testing



No Noise Guarantee



**Network Unit**  
CLASS A: F42-67ENU  
CLASS B: F42-67ENUB

**Coverage Unit**  
CLASS A: F41-8XCU  
CLASS B: F41-8XCUB

**Management Unit**  
F40-0E

## Public Safety DAS

### 1 to 6W Class A or B

### 700/800 MHz LMR with FirstNet

#### Best Performance:

Unparalleled Talk-In and Talk-Out Due to Real-Time, Slot-to-Slot Gain Control

#### Scalable Coverage:

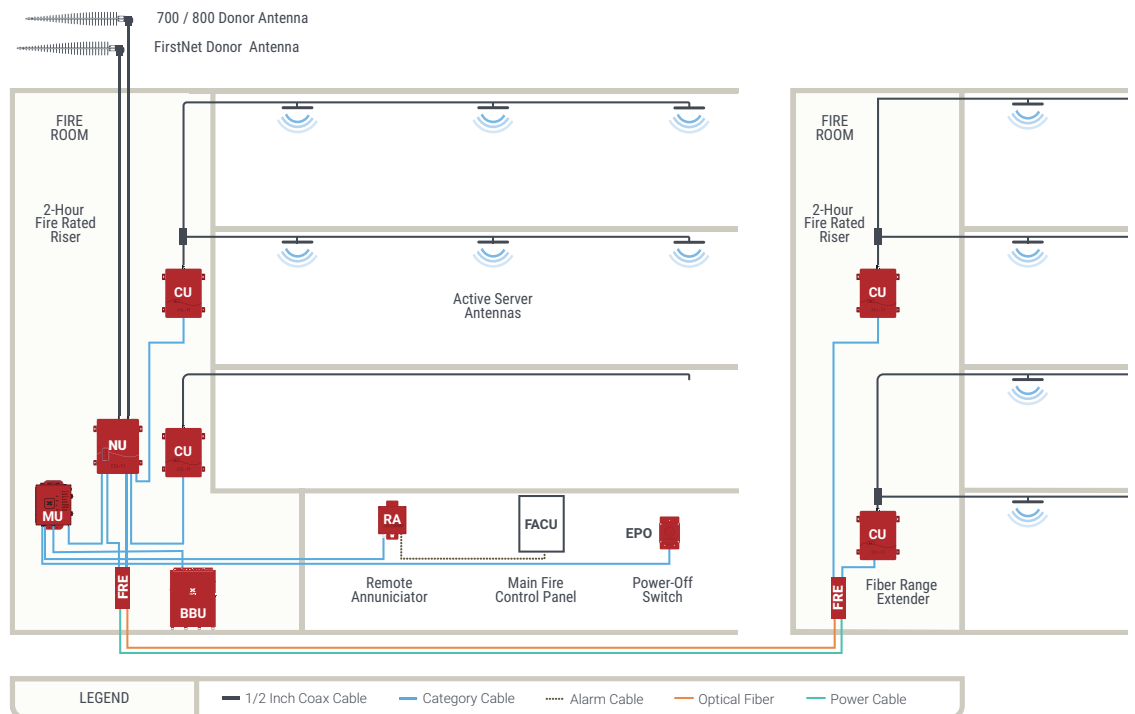
Up to 1.9M ft<sup>2</sup>

#### Open Platform:

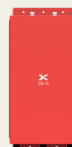
Compatibility with Third-Party Public Safety Components

#### Nextivity WAVE:

Easy Set Up and Monitoring with WAVE PRO App and WAVE Portal



#### Optional Components



**SHIELD EXTEND Battery Backup Unit (BBU)**  
F43-00



**SHIELD Remote Annunciator Panel**  
F42-10R-100



**SHIELD Emergency Power-Off Switch**  
F42-10E-100



**SHIELD Active Server Antenna**  
A33-10A-100



## Key Features:

- Automatic Uplink and Downlink Gain Setting During Commissioning Phase
- Industry-First Uplink Test for Talk-Out Guarantee Using Consumer Two-Way Radios
- Built-in Grid Test Functionality via Nextivity WAVE PRO App and COMPASS XR

- Built-in End-to-End Remote System Monitoring and Management via Nextivity WAVE Portal
- Proprietary IntelliBoost chip Delivers Unparalleled Real-Time, Talk-in and Talk-Out Performance
- Antenna Monitoring

# Advancing Emergency Responder Communication Enhancement Systems (ERCES)

## No Noise Guarantee

By monitoring environmental changes and performing automatic adjustments, Nextivity SHIELD ERCES ensure emergency personnel stay connected in any situation by delivering industry-leading performance with a no noise guarantee.

## Automatic Setting of Uplink Transmitted Power

Nextivity SHIELD solutions simplify the optimization of uplink (UL) gain for emergency communication systems by eliminating the need for additional equipment or guessing the calculations. The system calculates path loss automatically, allowing for different values according to network requirements and the option to set up a target range.

## Automatic Calculation and Setting of Isolation and Downlink (DL) Gain

While isolation is calculated in real-time and automatically set at 20 dB per NFPA 1221, the system allows for different values according to local ordinances. DL gain is automatically adjusted to achieve the required value.

## Detecting Time Delay Interference (TDI)

Because signal from other systems operating in the area can negatively impact signal clarity, Nextivity SHIELD ERCES detect any possible interference and report back via WAVE Portal alarms.

## Industry-First Talk-Out Guarantee

Nextivity SHIELD ERCES' ground-breaking uplink (UL) test allows integrators to easily achieve industry-leading talk-out performance by measuring the signal traveling from the installation site to the remote tower via walkie-talkie. Using COMPASS XR and the WAVE PRO app, installers can test UL gain levels and view real-time analytics to ensure the best-possible signal-to-noise ratio.



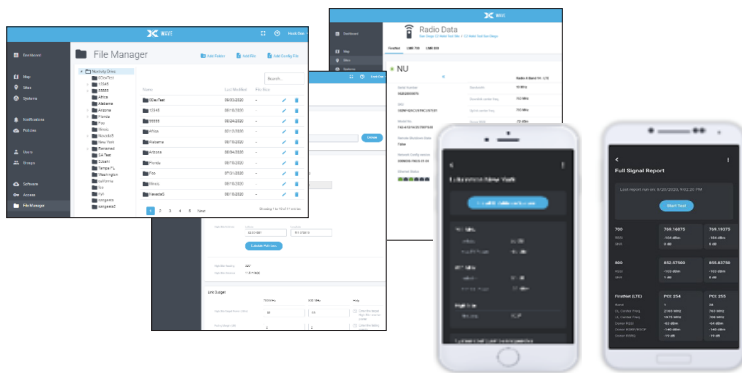
## Built-in Grid Test Functionality



With the Nextivity WAVE PRO app and COMPASS XR, system integrators can test the downlink (DL) gain for the design planning stage and post-install performance evaluation. Export the Full Signal Report as a .csv, which includes key LMR/Operator Network parameters: Operator, RSSI, RSRP, RSRQ, Frequency, Band, PCI, and more. Installers use system operation data to prepare for AHJ walk-through tests.

## Built-in End-to-End Remote System Monitoring and Management via Nextivity WAVE Portal

The web-based WAVE Portal provides installers and authorized users remote monitoring, managing, and control of Nextivity SHIELD ERCES from anywhere. In addition to easily adapting SHIELD systems to local fire codes, the WAVE Portal allows users to customize notification and policy parameters. The intuitive platform also offers advanced performance metrics on a SHIELD solution's individual components, including real-time high site-to-server antenna monitoring and donor signal quality reports.



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