

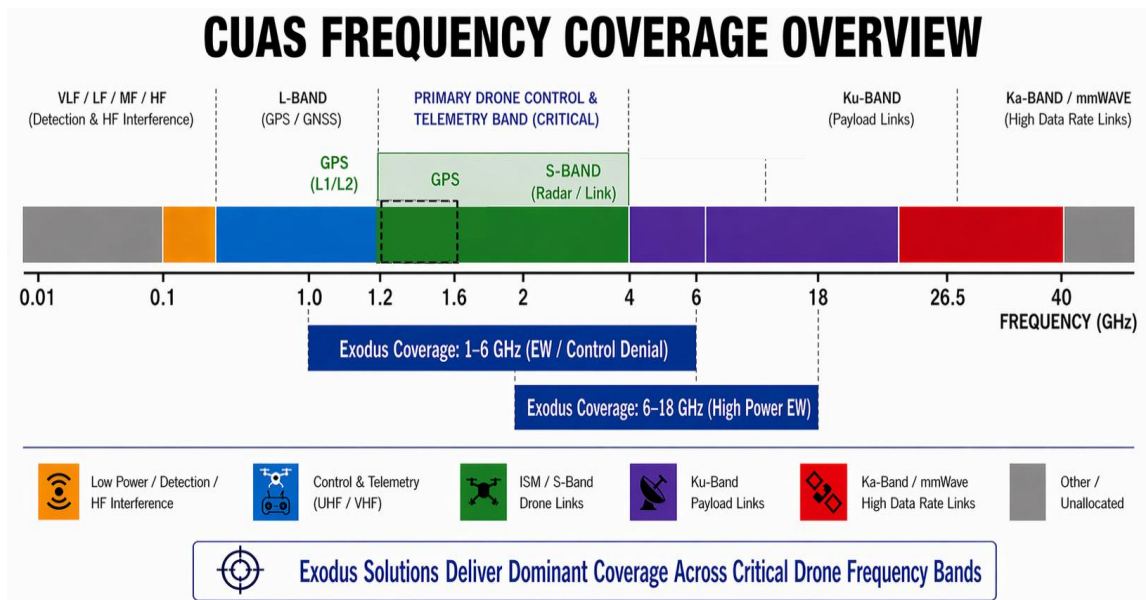


# HIGH-POWER RF AMPLIFICATION FOR COUNTER-UAS & ELECTRONIC ATTACK SYSTEMS

## *Dominating the RF Spectrum for Counter-UAS Superiority*

*High-power, wideband amplifier solutions engineered to disrupt control, navigation, and payload links across evolving drone threat environments.*

Modern drone threats require effective electronic countermeasures capable of denying control, navigation, and communication links. Counter-UAS (C-UAS) systems rely on high-performance RF power amplifiers to disrupt signals across multiple frequency bands used by commercial and military UAVs. Unlike lightweight UAV amplifier modules designed for SWaP-constrained platforms, Counter-UAS systems require significantly higher power levels to achieve effective signal denial at operational ranges.



*Critical drone communication and navigation bands addressed by Exodus high-power RF solutions*

## The Counter-UAS Challenge

Counter-UAS environments demand RF solutions that deliver high output power, wideband frequency coverage, and reliable operation in harsh conditions. Modern drone threats operate across diverse and overlapping frequency bands, including control links, telemetry, and GPS/GNSS navigation signals. To effectively counter these threats, RF amplifiers must provide broadband performance, high linearity, and sustained output power while supporting rapid response and adaptability.

Exodus high-power RF amplifier solutions are specifically engineered to address these challenges, delivering the output power, bandwidth, and reliability required for effective counter-UAS RF denial systems.



# Exodus High Power RF Amplifier Solutions

## High-Power RF Building Blocks for Counter-UAS System Architectures

Exodus Advanced Communications offers a scalable portfolio of high-power solid-state RF amplifiers designed for electronic warfare, GPS/GNSS denial, and counter-drone applications. These systems are engineered to support high-power RF denial architectures capable of disrupting control, navigation, and payload links across multiple frequency bands.

Integrated into mobile, fixed, and expeditionary platforms, Exodus amplifiers enable reliable, long-range electronic attack performance in complex and evolving threat environments.

***These solutions are deployed within high-power RF denial systems across mobile and fixed counter-UAS platforms, as illustrated.***



*Representative Counter-UAS RF Denial Deployment*

## Key Capabilities

- Broadband frequency coverage from sub-GHz through mmWave bands
- High output power for long-range RF denial and electronic attack
- Continuous wave (CW) and pulse-capable amplifier architectures
- Ruggedized designs for shock, vibration, and extreme environments
- Modular and scalable solutions for multiple deployment platforms

## Applications in Electronic Defense

- Drone signal jamming and denial systems
- GPS/GNSS interference and disruption
- Electronic warfare (EW) and electronic attack (EA)
- Base protection and perimeter defense systems
- Mobile and expeditionary counter-UAS platforms



## Broadband Counter-UAS RF Amplifier Configurations

Representative amplifier configurations for broadband counter-UAS RF denial

*These configurations represent scalable amplifier building blocks... that enable coverage across critical drone communication and payload frequency bands.*

**AMP20082**  
0.8–2.5 GHz

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0.5 GHz 18 GHz

**1000 W Output**  
GPS Denial / Control Disruption

Mobile Platform




**AMP20160**  
1.0–6.0 GHz

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0.5 GHz 18 GHz

**750 W Output**  
Wideband Electronic Attack

Expeditionary Truck




**AMP20178**  
6.0–18.0 GHz

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0.5 GHz 18 GHz

**400 W Output**  
Payload & Radar EW

Armored Platform




**AMP20102**  
2.0–8.0 GHz

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0.5 GHz 18 GHz

**400 W Output**  
Multi-band RF Denial

Tactical Trailer




**AMP20043**  
1.0–6.0 GHz

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0.5 GHz 18 GHz

**200 W Output**  
Mobile EW Applications

Helicopter Platform




**AMP40007**  
8.0–12.0 GHz

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0.5 GHz 18 GHz

**300 W Output**  
Extended Band EW

Naval Platform




## A Scalable Approach to Counter-UAS RF Design

By leveraging a family-based amplifier approach, Exodus enables system designers to scale RF performance across multiple platforms and mission requirements.



## Why Defense Integrators Choose Exodus

- True OEM RF manufacturer with in-house design and production.
- Proven support for military communications, ISR, and electronic warfare & radar programs.
- Flexible customization of frequency bands, power levels, and mechanical interfaces.
- Rapid transition from prototype to production hardware.

## Engineered for High-Power Counter-UAS & Electronic Warfare Systems

- High-power amplifier architectures optimized for long-range RF denial and electronic attack
- Scalable solutions across ground-based, mobile, and deployable defense platforms
- Broadband frequency coverage enabling disruption of control, navigation, and payload links
- Flexible system integration supporting rapid deployment and evolving threat environments

## Result: Operational Counter-UAS RF Denial Capability

- ✓ **Deliver long-range RF denial and electronic attack capability**
- ✓ **Disrupt control, navigation, and payload communication links**
- ✓ **Support scalable system architectures across ground and mobile platforms**
- ✓ **Adapt rapidly as threat environments and frequency requirements evolve**



### Ground Platforms

Most common and versatile. Ideal for EW, SIGINT, and communications jamming missions on land.

Optimized for mobile command vehicles, tactical trailers, and expeditionary systems where power, size, and reliability matter most.




### Airborne Platforms

Essential for stand-off EW, airborne surveillance, and fast-response electronic attack missions.

Our amplifiers support helicopter and fixed-wing aircraft operations, providing high power and performance in size- and weight-constrained environments.




### Naval Platforms

Critical for fleet defense, maritime interdiction, and shipboard electronic warfare systems.

Our amplifiers are built to perform in harsh maritime environments, delivering reliable power and bandwidth for surface ships and support vessels.




### Exodus Amplifiers

Engineered for performance, reliability, and mission success—across every domain.

Our amplifiers deliver high power, wide bandwidth, and exceptional efficiency in a compact, rugged design—trusted by defense and aerospace operators worldwide.



Contact Exodus Advanced Communications to discuss tailored RF amplification solutions for your counter-UAS and electronic warfare requirements.



# GLOSSARY OF TERMS & ACRONYMS

Definitions of key terms used throughout this document



**C-UAS**  
**Counter-Unmanned Aerial Systems:**  
 Technologies used to detect, track, and defeat drones.



**RF**  
**Radio Frequency:**  
 Electromagnetic signals in the radio spectrum used for communication, sensing, and electronic attack.



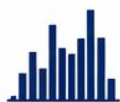
**GPS**  
**Global Positioning System:**  
 U.S.-owned satellite navigation system that provides positioning, navigation, and timing information.



**GNSS**  
**Global Navigation Satellite System:** Collective term for satellite-based navigation systems, including GPS, GLONASS, Galileo, and BeiDou.



**CW**  
**Continuous Wave:** RF signal transmitted continuously rather than in pulses. Used for jamming and denial applications.



**ISM**  
**Industrial, Scientific, and Medical (Bands):** Unlicensed frequency bands allocated for industrial, scientific, and medical applications.



**EW**  
**Electronic Warfare:**  
 Military operations involving the use of electromagnetic energy to control the spectrum or attack the enemy.



**EA**  
**Electronic Attack:**  
 Use of electromagnetic energy to degrade, disrupt, or destroy enemy systems and communications.



**ISR**  
**Intelligence, Surveillance, and Reconnaissance:**  
 Operations used to gather and analyze information about adversary capabilities and activities.



**SWaP**  
**Size, Weight, and Power:**  
 Critical design factors, especially for systems with space and power constraints.



**UAS / UAV**  
**Unmanned Aerial System / Vehicle:** Aerial platforms that operate without an onboard human pilot.



**SIGINT**  
**Signals Intelligence:**  
 Intelligence derived from the interception and analysis of signals and communications.



These terms represent common abbreviations used in counter-UAS, electronic warfare, and RF system design. For additional technical details, contact Exodus Advanced Communications.