

EJM87

ReJAMM omni

The ReJAMM omni is an advanced, modular (not only) vehicular jamming system specifically engineered to provide comprehensive protection against radio-controlled UAV, improvised explosive devices (RCIEDs) and other wireless threats. By effectively disrupting radio frequency communications across a broad spectrum, it ensures the safety of personnel and assets in high-risk environments.

Key specifications include a wide frequency coverage from 20 MHz to 6000 MHz, with optional extension beyond 6000 MHz, and output power reaching up to 100 W per band. The system supports fully reactive, active, or hybrid operating modes, allowing independent activation and configuration of each frequency band to achieve superior performance, spectral efficiency, and adaptability to evolving threats.

Customization and Scalability Designed with scalability in mind, the ReJAMM omni can be fully customized in terms of physical size, frequency allocation, power levels, and module composition to precisely align with specific operational requirements and platform constraints. This flexibility ensures optimal integration without compromising effectiveness or reliability.



JAMMING ALGORITHMS

The ReJAMM omni features advanced jamming algorithms with versatile disruption options. Reactive mode monitors the RF environment, detects signals above adjustable thresholds (-110 dBm to 0 dBm), and applies targeted interference only on detected frequencies for efficient power use. Active mode provides continuous jamming via barrage noise, custom waveforms, or white noise at full power. Hybrid mode combines both for proactive and responsive coverage within the same band.

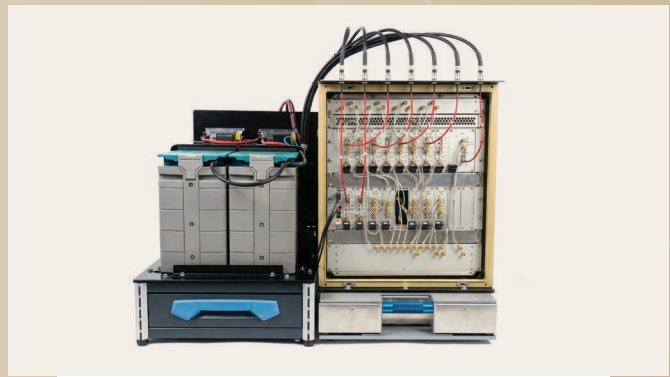
Modular Architecture and Antennas Programmable antenna diversity optimizes reception and transmission across varied terrains using integrated RF switches for shared antennas. The modular design includes signal generator modules with dual 300 MHz bands configurable from 20 MHz to 6000 MHz,

supporting sub-bands for precise frequency and mode control. Power amplifiers deliver up to 100 W in low (20–620 MHz), medium (600–2700 MHz), and high (2700–6000 MHz) variants, with omnidirectional antennas tailored to each range.

Operation and Applications An intuitive graphical user interface enables programming of frequencies, power levels, modes, and protected notches while preserving friendly communications. Real-time monitoring delivers alerts for system integrity. Powered by 9–36 V DC from vehicle batteries, the system suits military convoys in high-threat areas, VIP protection, law enforcement operations, and peacekeeping missions, providing scalable defense against wireless detonation threats with reliable vehicle integration.



ManPack typical configuration: total output power of 250W covering 20 to 6000MHz (2400MHz RTBW)



Reactive Anti-Drone Jammer typical configuration: total output power of min. 800W covering 20 to 6000MHz (min. 2400MHz RTBW)

PARAMETER	VALUE / DESCRIPTION
Frequency Range	20 MHz – 6000 MHz (optional extension beyond 6000 MHz)
Output Power per Band	Up to 100 W (50 dBm)
Operating Modes	Reactive, Active, Hybrid (combinable within the same band)
Jamming Types	Barrage noise, Custom waveforms, White noise, Targeted reactive interference
Detection Threshold (Reactive Mode)	Adjustable: -110 dBm to 0 dBm (depending on bandwidth)
Signal Generator Modules	Dual bands, each up to 300 MHz wide, configurable within 20–6000 MHz
Signal Generator Output Power	Up to 16 dBm (default 0 dBm)
Power Amplifier Variants	PAL: 20–620 MHz, 100 W PAM: 600–2700 MHz, 100 W PAH: 2700–6000 MHz, 50W, 100W
Antenna Types	Omnidirectional, optimized per band (e.g., 20–620 MHz omni, 800–2690 MHz X-Pol panel, 200–6000 MHz omni)
Antenna Impedance	50 Ohm
Power Supply	9–36 V DC (vehicle battery compatible, with backup support)