



DRONE JAMMING VEHICLE

PRODUCT DESCRIPTION

A tactical Vehicle with a mobile jamming system for detection and neutralization of unauthorized drones from entering secured fields and campuses.

SYSTEM FEATURES

A passive scanning system responsible for the detection of drones and the drone operator through

- ▶ An array of directional antennas
- ▶ One high gain Omni directional antenna

A jamming unit blocking all Radio communication channels (WiFi, Video, Telemetry, Datalink and GNSS) either disabling or commanding the drone to “return home”.

- ▶ Easy to use programming interface
- ▶ Programmable output power for each band
- ▶ High VSWR protection
- ▶ Built in filter for RF interference outside the jamming bands
- ▶ The jamming system is enclosed in the back of a small SUV, generated from batteries inside the vehicle.

Applications:

- ▶ Protected areas
- ▶ Governmental facilities
- ▶ Oil refineries
- ▶ Military bases
- ▶ Prisons

TECHNICAL SPECIFICATIONS – VEHICLE

RF Characteristics	
Output Power	Up to 50W per Band
Internal Modulation	FM Hopping Frequency & White Noise
Signal Source	DDS & Tx DAC synthesized
Power Supply	28VDC or 110/220VAC
Modules Per Unit	4
Remote Control	TCP/IP Protocol
Antenna	3 High Gain Directional Antennas per Band (GNSS, 2.4 GHz & 5.8 GHz) 1 High Gain Omni-Directional Antenna for 2.4 GHz
Jamming Range	Directional Antenna: up to 4 km Omni-Directional Antenna: up to 2 km GPS: up to 5 km
Modes of operation	2 Modes: Dual (Omni-Directional + Directional) Single (Directional)
Jamming Frequency Range	
Frequency Band	1,565-1,609 MHz – 5W 2,400 – 2,483 MHz – 100W (2 modules of 50W) 5,125-5,850 MHz – 50W *Additional Bands from 20-6,000 MHz can be added, depends on customer's request.
Air Interface Standards	ISM, GNSS, Video, Telemetry, Datalink & WiFi
Physical Data	
Dimensions	Total 19" 4U
Weight	Approx. 35 Kg
Environment of operation	
Operating Temp	-20°C - +65°C
Humidity	95%
IP Standard	IP-52

DIGITAL RECEIVER BLOCK

RF Characteristics	
Frequency Range	20-6,000 MHz
Frequency Setting	10 KHz, 25 KHz, 100 KHz, 1 MHz
Frequency Accuracy	Better than 0.5 ppm
Aging	0.5x10 Exp-6/year
Synthesizer Setting Time	Better than 3ms
Oscillator Phase Noise	<-92dBc/Hz at 10KHz offset
Antenna input	N-Type 50Ω
RF Attenuation	30dB
Sensitivity , Overall Noise Figure	-120dBm, typ. 10 dB
Demodulation	AM, FM, CW
Demodulation Technique	FFT
DATA Format	2 x 16 Bits
Instantaneous Bandwidth	400MHz
Squelch	Can be set between -120dBm to -30dBm
Gain Control	80 dB
Scan Characteristics	
Automatic Memory Scan	4000 Channels
Frequency Scan	Start/Stop/Step definition with receiving data set
Inputs/Outputs	
Scan Characteristics	Scan Characteristics
Digital IF output	Parallel / Serial Data up to 512 kbps: 2 X 16 bit
IF 10.7 MHz, Wideband	Analog output
DATA Interface	LAN/ RS232
Environment of operation	
Operating Temp	-30 - +65°C
Humidity	5 – 95%
Storage Temp.	-40°C - +70°C
Power	
Operating Voltage, Current	12V, 2A

DRONE JAMMING VEHICLE



CONTROL SYSTEM



DRONE KILLER



PRODUCT DESCRIPTION

Counter UAV solutions for Military, Federal, and Local Law Enforcement.

Allows security teams and law enforcement to identify and intercept a drone approaching a Forward Operating Base, hovering over a large crowd, snooping into secure/private areas, or flying in restricted airspace.

The drone command link is intercepted while ordering the drone to descend or go home.

Easy Operation - aim at the drone and toggle the switch.

PRODUCT FEATURES

Ability to command the drone to land or go home due to weakness exploitation of the drone communication protocols:

COTS 915 MHz, 2.45 GHz and 5.8 GHz

HAM radio 433, 445 and 455

Integrated RF Identification and Location:

Reliable aiming due to an integrated RF power meter and signal analyzer (even in low visibility)

Identification of types of messages coming from the target drone (C2, video, telemetry, etc.)

GPS Disruption (Optional)

Jams GPS L1 and GLONASS L1 frequencies.

Can trigger ISM & GPS/GLONASS bands, separately or simultaneously.

Highly Directional: Limited area of effect that will not disrupt other RF systems.

Portable and does not require an external power source/auxiliary equipment

Upgradable

DRONE KILLER SPECIFICATIONS

Size	21”L s 10.5”H x 6.5”W (53cm x 27 cm x 16 cm)
Weight	4.9 lbs.
Batteries Type	BB-2847A/U (BT-70747) Li-Ion rechargeable battery.
Endurance	3+ hrs. continuous jamming, 10+ hrs. in RF detection mode
Continuous Operation	12 VDC input power
Effective range	750m to 1000m depending upon range from drone to controller. Typical range is 300% of distance from drone to controller
Duty Cycle	Transmits continuously upon activation
ISM Jamming Frequencies	433 MHz, 445 MHz, 455 MHz, 915 MHz, 2.45 GHz and 5.8 GHz bands.
GPS Jamming Frequencies	GPS L1 and GLONASS L1 frequencies using shaped beam to minimize inadvertent GPS disruption.
Applicability	Effective on all Group 1 and Group 2 UAS sold worldwide using 433 MHz, 445 MHz, 455 MHz, 915 MHz, 2.45 GHz and 5.8 GHz bands for communications