

SIGN4L

V-PROTECT



State of the art mobile active/reactive high power jammer system.
This system enables jamming of all common terrestrial RF signal technologies as well as portable SATCOM equipment

SPECIFICATIONS

USE CASE

- Counter Remote Controlled Improvised Explosive Device (C-RCIED)

KEY FEATURES

- Mobile operation. Installed in a vehicle
- Jamming of all frequencies associated with radios, walkie-talkies, mobiles and Wi-Fi within the operating bands (20 MHz to 6 GHz)
- Up to 16 wideband jammers for simultaneous operation across all bands
- Combination of active and re-active jamming for maximum coverage range
- Typical jamming ratio for single threats $\geq 1:1$

COMPONENTS

- Equipment installed on mobile platform
- Outdoor omni and directional antennas installed on roof rack
- Power provided by mobile platform with battery backup

Equipment	L mm	W mm	H mm	W kg
Jammer System (x4 units)	600	165	482	160
Twin rack (x2 units)	386	535	620	70
Power Unit	-	-	-	160
Lithium Battery Pack (x4 units)	625	200	355	120
Roof Rack & Cover	2940	1250	390	90
Antenna System	2200	500	400	30
Equipment Total				630

Toyota Landcruiser Setup	L mm	W mm	H mm	W kg
Vehicle incl. roof rack and antennas	4950	1970	1950	3350
Total with Equipment				3980

GMC Yukon XL Setup	L mm	W mm	H mm	W kg
Vehicle incl. roof rack and antennas	5800	2400	2590	3500
Total with Equipment				4130

SPECIFICATIONS^①

Hardware	
RF Jamming Frequency	20 to 6000 MHz continuous
Total Output Power	Up to 1400W CW ^②
Signal Source	Field Programmable Gate Array (FPGA)
Jammer Type	Hybrid – Reactive and Active Jammer
Exciter instantaneous bandwidth	16 x 400 MHz
Exciter sweep time	≤ 1.8μ-sec.
Jammer Total power control step	2dB steps with on board attenuators.
Power Consumption (Peak)	≤ 5KW
Connectivity to Command & Control	Ethernet interface.
Antenna	Omni and directional antennas
Safety	Alarms for VSWR, temperature, voltage and current
Environmental ^③	Designed to meet MIL-STD 810G
Software	
Remote Control Unit (RCU)	Graphical User Interface (GUI) application.
Exciter controller	Ability to activate/deactivate specific frequency bands.
Jammer Power mute per bands	GUI allows the user to mute specific bands before activation.
Jammer Power mute for all bands together	GUI allows the user to mute all bands instantaneously
Safety measures	Alarm for VSWR temperature, voltage and current.
Health monitor	System status (Initializing, standby, transmitting, overvoltage, over current)
Selectable jamming threats	Wide band protection (Default preset)

DEPENDENCIES

- Any fleet communication channels the end-user wishes to use must be selected outside the frequency of operation of the Jammer.

^① All specifications provided herein are indicative values and figures, and there may be reasonable deviation from the same.

^② Total power at PA port inside the payload, reduced power at payload's TX port

^③ The environmental conditions stated above apply to the V-Protect systems' main components only.