



Jamming System

Our jamming systems are in-house developed, for guard from explosive attacks and remote activations, with cell phone frequencies and military low frequencies. To ensure the functionality of the jamming system, preventing the IED from activation, our jamming systems are developed with enough RF power and a proprietary RF signal.

Jammers are built only on demand of government agencies and their capacities cover even low military frequencies.

General information

Principle of operation:

Frequencies jamming systems are built to prevent communication between two devices that use RF as link, being military or expert instrumental. Therefore the activation of explosive devices operated using the RF link are inhibited and their activation is prevented. When RF is used as link for the activation of explosive devices, unwanted communications, spy viruses remote activation, with these systems, this type of operations are inhibited. A protection for the personal and the integral maintenance of technological forensics proofs is generated.

RF Power:

To ensure the effectivity of the jamming system, the RF Power emitted must be greater than the power required for the receiver of the RF link to work properly.

Operation range:

The range in meters covered by the jammer is a bubble with its center on the device when used with omni directional antennas, and a cone with its vertex on the device when used with directional antennas. The effective range is determined by the RF power of the jammer but it is affected by the power of the transmitter of the RF link and is reduced when there are physical objects such as buildings, walls, vehicles and trees near the jammer.

Specifications

Protection range:

The protection range provided by each jammer is approximately 100 meters for triggering devices with RF power below 1W, 10 meters for triggering devices with up to 100W and 100 meters for devices that operate using cellphone technology (GSM, 3G, 4G). These ranges belong to a mobile presentation of the system, and are increased if the system is installed on a fixed location with antennas with sufficient height.



Jamming band	Frequency
GSM	824 to 894 Mhz
	876 to 960 Mhz
	1710 to 1880 Mhz
	1850 to 1990 Mhz
CDMA	450 Mhz
HSPDA	2110 to 2170 Mhz
Wideband AM/FM/FM on comercial band, bandwidth:	6 Khz
	15 Khz
	50 Khz
	230 Khz
UMTS/3G/4G	2110 to 2170Mhz
	824 to 894 Mhz
	876 to 960 Mhz
	1710 to 1880 Mhz
	1850 to 1990 Mhz
WiFi	2400 to 2500 Mhz
Wideband AM /FM / FM	MF 100 Khz to 3 Mhz
	HF 3 Mhz to 30 Mhz
	VHF 30 Mhz to 300 Mhz*
	UHF 300 Mhz to 2700 Mhz*

Systems can work connected to electric networks (220 VAC, 110 VAC) and 12V car batteries in case the customer needs to install it on vehicles. Also the presentation can be in computational rack or military grade briefcases according to the necessity of the client.

Battery operation:

The system can be delivered with the capability to operate without the use of grid energy. The client must specify the quantity of continuous hours of operation, and the system will include an appropriate battery pack.

Weight:

The weight of the jammer is dependent on the RF power required, the amount of frequency bands needed and strongly dependent on the quantity of batteries required to ensure the amount of hours the device should be working without grid energy.

100 Watts Jamming System:

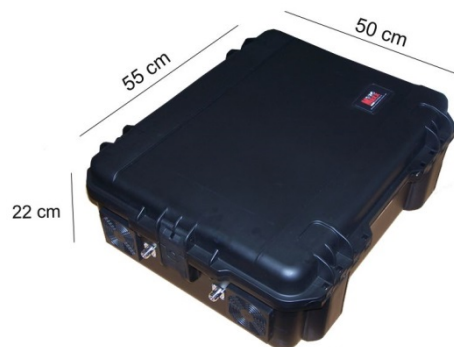
Dual-band jamming system for cellular communications, with 100 Watts output per band.

Optional power: 200W, 360W, 400W per channel. More power per channel available on request, please consult delivery times.

The jamming range depends on the jammer power, the jammer antennae, and the jammer location related to the BTS.

Remote supervision through the control center, high security long range RS485 communication. The system allows several devices on a network, with no units limit. We also have integration platforms to CCTV systems for prison applications.

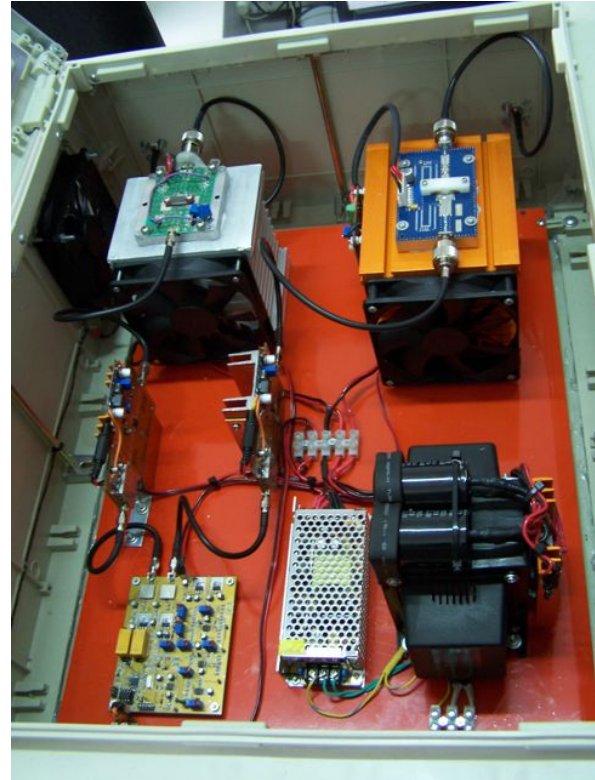
The power supply is 220 o 110 VCA, with 2 or 4 A current respectively.



Suitcase Version

Technical Specifications

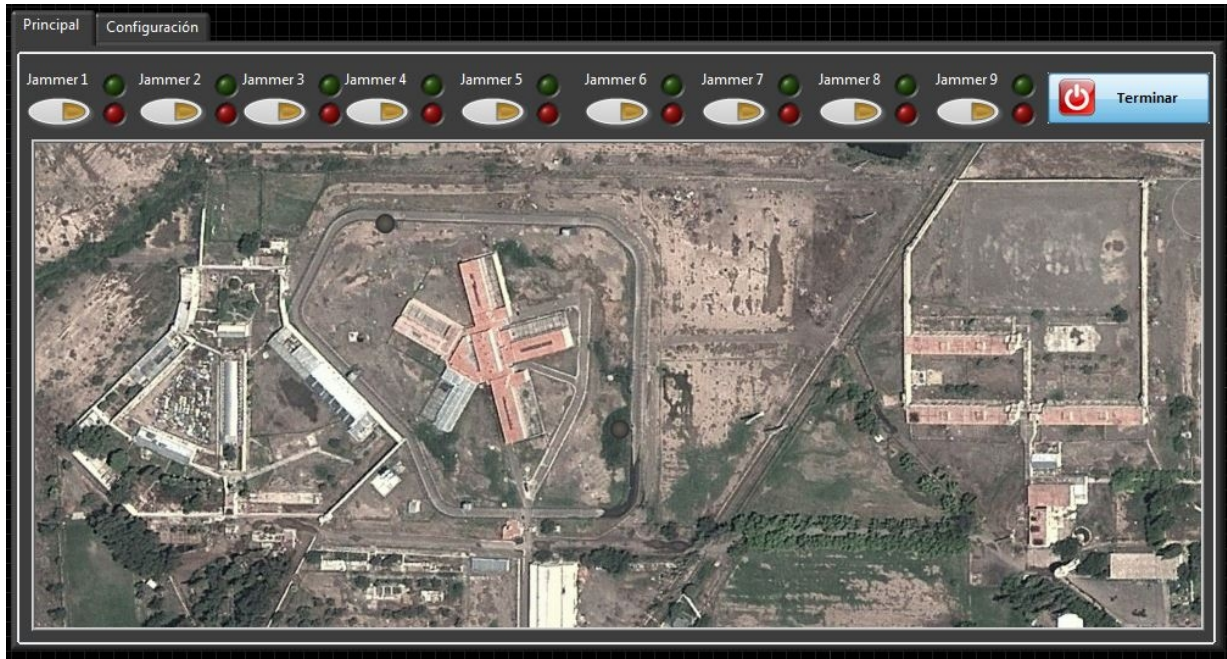
Jamming Bands			Power
	GSM	UMTS/3G/4G	
STM	824 to 894 Mhz	824 to 894 Mhz	100 W
PCS	1930 to 1990 Mhz	1930 to 1990 Mhz	100 W
4G	1920 to 1980 Mhz	1920 to 1980 Mhz	100 W
	2110 to 2170 Mhz	2110 to 2170 Mhz	



Cabinet Version

The jammers are manufactured as independent units, but can be controlled in a centralized way with a single control center, as shown in the pictures. This allows to have an unlimited coverage by installing the jammers in a grid form.

Remote Supervision (off)



Remote Supervision (on)

