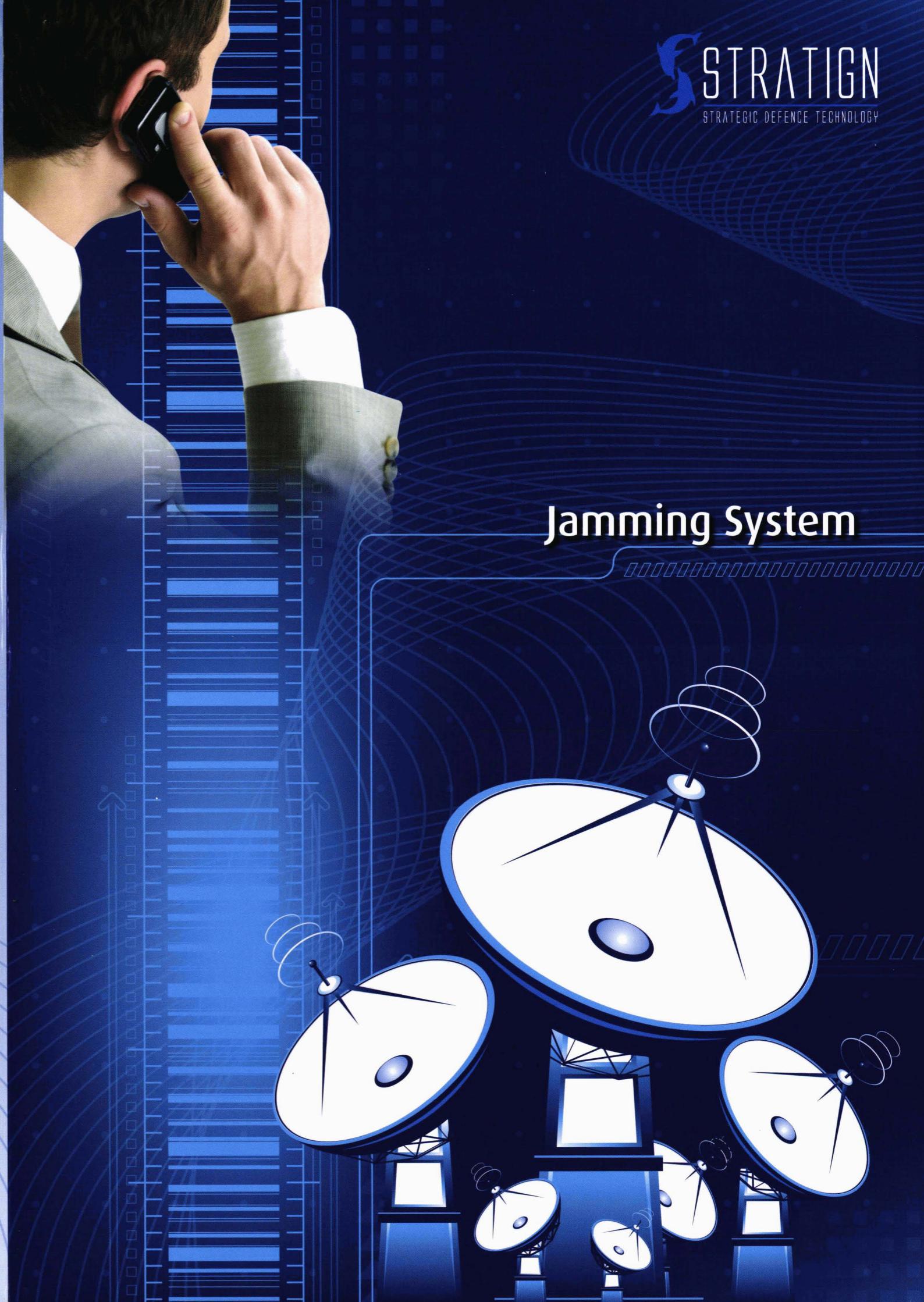


About Stratign

Stratign FZCO is a UAE based company, providing High Grade state of the art Communication Intelligence solutions for defense and law enforcement agencies globally. Established in the year 2002, the company has a very strong presence in Middle East, South East Asia, Africa, Europe, Latin America and CIS countries. Continuous endeavor in the field of R&D with committed and highly skilled manpower, providing precise solutions for the challenges faced by the customers has made Stratign a well known entity within a short span of time. We are committed to provide competent technologies at an affordable price to defense and law enforcement government Agencies, we would like to offer you our strategic products on GSM, Thuraya Monitoring and Satellite Monitoring etc. The user-friendliness and capabilities of these systems have made them immensely popular among various agencies world wide. Stratign is uniquely positioned to offer latest technological, cutting edge mission-critical products systems and customized solutions for Communication Surveillance, Signal Analysis, Communication Security and Jamming Systems. All solutions meet the best quality or military Standards.

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Introduction

The aim of jamming is to prevent communication by electromagnetic means, or at least to degrade communication sufficiently to cause delays in transmission and reception. Jammers transmit electromagnetic signals in form of deliberate radiation, re-radiation or reflection with the objective of impairing the effective use of electronic communication systems.

Working closely with leading military forces and government agencies, Stratign offers a wide range of jamming and detection systems, used on a daily basis in conflict zones around the world. Stratign offers various configurations of communication Jammers as well as RCIED (Radio Controlled Improvised Explosive Devices) Jammers.

Communication Jammers

Stratign's Communication Jammers are intended to create active barrage jamming in tactical units of the enemy within the frequency range from 1.5 to 120 MHz. The frequency range covers the frequencies for work of all tactical military HF and VHF radios. Stratign is proud to provide range of Radio jammers supplied in customized vehicles, single use artillery shells and man-pack versions.

Apart from HF/VHF Jammers Stratign also offers Cellphone Jammers, Satellite Phone Jammers, GPS Jammers, FM Jammers and VSAT Jammers.



RCIED (Radio Controlled Improvised Explosive Devices)

Whether in military or civilian applications, protecting troop and VIP convoys from the threat of roadside bombs, or radio-controlled improvised explosive devices (RCIEDs), has become a very high priority and a tactical challenge. Stratign is proud to provide range of RCIED Jammers, supplied in specially customized vehicles, Briefcase, Man-Pack as wells as Static versions. These systems provide the ultimate protection of convoys from the threat of radio-controlled road-side bombs.

RCIED Jammers (Radio Controlled Improvised Explosive Devices)

RCIEDs (Radio Controlled Improvised Explosive Devices) and IEDs (Improvised Explosive Devices) are the weapon of choice used by terrorists in conflict zones. Homemade IEDs and roadside bombs are remotely activated by transmitting an RF signal, via a remote transmitter, to a receiver attached to the bomb or improvised explosive device. Stratign's RCIED Jammers are designed to neutralize the detonation of the explosive by interfering with the radio transmission that the bomber initiates to trigger the bomb. It does this by radiating a jamming signal that obliterate the desired command signals for the RCIED

Stratign offers various configurations of RCIED Jammers to suite various operational requirements of the customers.

1. Vehicle Mounted RCIED Jammers
2. Briefcase / Man-Pack RCIED Jammers

Vehicle Mounted RCIED Jammers:

The vehicle mounted RCIED Jammer is generally used for convoy protection or protection of designated area for military/police deployment at large public gatherings, riots, marches, anti-government protests, rallies, etc. This device is installed inside the vehicle. The customer may choose any Sports Utility Vehicle (SUV) similar to Toyota Land Cruiser. The system is powered by a dedicated power supply integrated within the vehicle. The system features an integrated forced air cooling system which ensures uninterrupted operation in any climate. A set of high-gain, omni-directional antenna is mounted on the roof of the vehicle. System management, including activation, operation and band control, is performed using a remote control unit installed inside the vehicle.

Based on the customers' requirement the Jammer can be factory configured to operate in a frequency band of 20 MHz – 6 GHz. The power output of the Jammer can also be factory configured from 60W upto 1400W.

Parameter	Value
Frequency band, MHz	20 - 3000 MHz wideband jammer without frequency gaps and windows 3250 - 3750 MHz (Optional) 5000 - 6000 MHz (Optional)
Type of antennas	One set omni-directional for vehicle installation
Total RF output power	Upto 1400 W nominal RF power divided on the frequency Sub-bands. Jammers with lower/higher power can also be produced depending on user requirement.
Number of frequency sub-bands, (Tx modules)	Depends of the Frequency Band. For 20-3000 MHz there will be 9 Modules.
Type of interference	Sweep fast random scanning (FRS)
Mode of interference	Barrage
Power supply	<ul style="list-style-type: none">• 26 VDC from batteries• 220 VAC from mains via power supply unit
Working temperature	-20°C - +55°C
Cooling mode	Air cooling
Remote control function	Yes by remote Control Unit inside in the vehicle

Communications Jammers

The term communications jamming (COMJAM) is electronic jamming that is directed against communications circuits and systems. COMJAM is used to prevent radio communications by the use of electromagnetic signals, i.e., the deliberate radiation, re-radiation, or reflection of electromagnetic energy with the objective of impairing the effective use of electronic communication systems. The aim of communications jamming is to prevent communications by electromagnetic means, or at least to degrade communication sufficiently to cause delays in transmission and reception.

Stratign offers various configurations of RCIED Jammers to suite various operational requirements of the customers.

Radio Jammers

Stratign's Communication Jammers are intended to create active barrage jamming in tactical units of the enemy within the frequency range from 1.5 to 120 MHz. The frequency range covers the frequencies to work on all tactical military HF and VHF radios. Stratign is proud to provide range of Radio Jammers supplied in customized vehicles, single use artillery shells and man-pack versions.

Cell Phone Jammers

Stratign's Cell Phone Jammer's have been designed to provide the blocking of various means of cellular communications in any area where they frequently cause nuisance either by loud incoming call rings or loud telephone conversations or to block the communication in the secured area. Phone Jammer is suitable in Prisons, Executive offices, Board Meeting Rooms, Conference Halls, Seminars, Public Sport Arena, Libraries, Cinemas, Religious Places, Public Transport, Concert Halls, Restaurants and Educational Institutions etc.

Stratign's Cell Phone Jammer is available in various configurations. They are capable of jamming Analog (AMPS, TACS, NMT) Digital (GPRS, GSM, DCS, CDMA, PDC, TDMA, PHS, PCS, iDEN, W-CDMA and UMTS) and are available in powers ranging from 900mWatts to 260 Watts.

GPS Jammers

Stratign's GPS Jammers are used for area protection against satellite navigated hostile threats. It will effectively protect a well defined area from ground and sky threats while it will not, in any way, affect normal operation of navigation services outside this area. It is designed to operate for all Satellite Navigation Systems available today or in the near future, including GPS, GPS III, GALILEO and GLONASS. It is upgradable to operate for COMPASS.

The system's base configuration covers the standard GPS bands L1 (codes P(Y), C/A, L1C, M-code) and L2 (codes P(Y), C/A, L1C, M-code) while versatile options allow the system to be configured for GPS III, GALILEO and GLONASS.

This system is capable for jamming GPS signals in the range of 10KM to 150 KM for military grade GPS signals and 30KM - 350KM for civilian signals

FM Jammers

The Stratign FM Jammer is designed to prevent FM radio reception in a designated area. The FM Jammer is a power full jamming system, designed specifically for military/police deployment at large public gatherings, riots, marches, anti-government protests, rallies, etc. to jam the FM radio reception. The Jammer is designed to effectively jam FM radio reception within a large designated area where jammer is deployed. Based on advanced jamming technology, the system transmits RF signal which block the communication between the FM broadcasting station and FM receiver, actively jamming FM frequencies.

The Jammer is available in the Frequency range of 88-108 MHz in bands with a Transmit output power @ 88-108 MHz 1000 Watts.

VSAT Jammers

Stratign's C & Ku band Satellite Jammer is a latest development in response to various requirements from customers who are interested in deploying jamming systems and sub-systems to fight terrorism and illegal usage of Satellite Spectrum technology. The system is an integrated platform, which can be deployed on Land (Vehicle, Shelters, Telecom Towers etc.), Air (Aerostats / Balloons) or in sea (Cargo Vessels / Boats). The basic objective of the system is to conduct jamming on DOWNLINK Signals of a particular frequency of Interest. These frequencies can be on a TV channel or even of a particular VSAT network. The system caters to VSAT terminals operating in C or KU band and is designed on customer specific requirements. The Static Variant currently enables the customer to jam KU Band and/or C Band VSAT/ TVRO Reception communications in the area of 20 x 20 kms. To jam a bigger area, multiple systems can be used simultaneously.



Briefcase/ Man-pack Installed RCIED Jammers

Briefcase RCIED Jammer is a Portable Bomb Jammer built into a briefcase, designed to defend against radio-controlled improvised explosive devices. The Jammer is designed to be operated as portable system movable from car to home, office, operational field etc. In case of portable operation, the Jammer is powered by an internal rechargeable battery with an autonomous operation capability of upto 1 hour. In case of vehicular operation the Jammer is powered by a special supply that can be supplied optionally.

The Man-Pack jammer is a lightweight portable system used to protect military, law enforcement and EOD personnel in areas which could harbour potential radio-detонated IED threats. It is used for jamming RCIED's to protect people or vehicle on the move either during a column march or during an individual vehicle movement. The equipment is especially useful to protect against radio controlled land mines.

Based on the customers' requirement the Jammer can be factory configured to operate in a frequency band of 20 MHz – 2 GHz. The power output of the Jammer can also be factory configured from 50W upto 250W.



Parameter	Value
Frequency band, MHz	20 - 2000 MHz wideband jammer without frequency gaps and windows
Type of antennas	Internal omni-directional antennas in case of Man-Pack and Portable operations and external antennas in case of vehicular operations.
Total RF output power	50 – 250 W depending upon configuration
Number of frequency sub-bands, (Tx modules)	8 Nos.
Type of interference	Sweep fast random scanning (FRS)
Mode of interference	Barrage
Power supply	Internal power supply with autonomous operation of upto 1 hours.
Working temperature	-20°C - +55°C
Cooling mode	Air cooling
Remote control function	Yes by handheld remote Control Unit