About Enterprise Control Systems Ltd

Founded in 1988, Enterprise Control Systems Ltd placed growth and development at the forefront of its operations and has increased steadily in size to its current operation of over 80 employees at its purpose built Technology Park in Northamptonshire, England.

The engineering team combines some of the most experienced individuals in RF engineering, software development and mechanical design, all factors important in the design of RF Inhibitors. A developed graduate training programme ensures a constant input of new talent with the keenness to be amongst the best.

The success of Enterprise Control Systems Ltd is attributable to the ability to design all products in-house with emphasis on long-term reliability through proven quality management processes. One third of the company is dedicated to product development, ensuring that Enterprise Control Systems Ltd consistently produces leading designs and is able to react quickly to changing threats.

Intelligent Protection

The ability to counter terrorist threats and to provide communication security continues to be one of the highest global priorities. Remote Controlled IED’s and the proliferation of mobile communications mean that RF inhibitors are in much demand by security, police, paramilitary, military and commercial users.

By using accurate threat analysis with the very latest technology, Enterprise Control Systems Ltd can provide a genuine counter to the most demanding threats.
**Kestrel**

Kestrel is a flexible-role lightweight jamming system designed for easy deployment in a dismounted patrol. It can also be utilised by Explosive Ordnance Disposal operators in the manual carry forward frame for Improvised Explosive Devices Disposal or a remote carry forward role utilising a Remote Control Vehicle.

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**Dart**

The Dart series is a range of portable jamming systems designed for fast deployment in ruggedised briefcase form. The system can easily be transported to site, switched on and armed for instantaneous jamming in the required frequency bands.

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**Falcon**

Falcon is a field-proven, wide-band, vehicle-mounted jamming system with a composite RF power output of 140 Watts. Incorporating DDS technology, the Falcon is designed for rapid vehicle deployment and, provides an effective and efficient response to RCIED threats.

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**Griffin**

The third generation of GRIFFIN transmits powerful jamming signals over a wide frequency range using the latest digital technology. The DDS power module technology allows for energy efficient countermeasures and provides greater range for convoy protection.

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**Threat management**

New intelligence on threats is continuously updated and evaluated. Suitable antidotes are developed in order to continue the battle against RCIEDs.

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**EMC chamber**

We have invested in a state-of-the-art EMC chamber, enabling the engineering team to design and test all jammer products and antenna configurations.

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**Antenna design**

An important element in the performance of the jammer is the antenna system and its design. The engineering team design and develop the best solutions.

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**Peregrine**

Combining accurate threat analysis and sophisticated technical solutions the Peregrine Individual ECM (IECM) Jammer provides a reliable counter to RCIED threat.

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**Customer support**

A dedicated team of experienced engineers, many with a military background, ensure that the customer receives a system appropriate to their requirements.

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Kestrel is a family of lightweight, multi-role inhibitors designed for rapid deployment. Kestrel inhibitors can be programmed for use in the patrol man-pack role with a total weight of less than 7 kilogrammes including the battery. A carry-forward frame allows a number of Kestrel inhibitors to be co-located, covering multiple threat bands, providing a solution for Improvised Explosive Device Disposal (IEDD). The Kestrel can also be configured for vehicle installations by connecting a power amplifier and specialist antenna ground plane for vehicle convoy protection.
The Dart Series is a range of portable Radio Frequency (RF) inhibitor systems designed for fast covert deployment in a ruggedised briefcase form.

A Dart inhibitor can be used to block radio communications, where the integral directional antenna comes into its own, or it may be deployed to counter specific threats in areas where Remote Controlled Improvised Explosive Devices (RCIEDs) are known to be used. The area of coverage is dependent upon factors such as distance from cell broadcast stations and proximity of local infrastructure, but coverage of several kilometres can be achieved.
Falcon Plus

Falcon Plus is a vehicle-mounted, wide-band Radio Frequency inhibitor providing a power-efficient and effective response to the modern and varied RCIED threat.

Having a wonderful 140 Watt four channel transmitter, Falcon Plus is suitable for convoy and VIP protection use. It is ideal for both military and civil vehicle use and has a proven operational pedigree.

The system may also be used in a static location for event, patrol-base or venue protection.
The latest generation of Griffin transmits powerful jamming signals over a wide frequency range using the latest digital technology.

The modular digital design allows the system to be expanded to customer requirements. The energy efficient countermeasures provide considerable range for convoy and VIP protection.

Using an alternative wide-band fill the Griffin may also be used as a communication jamming system.
Threat management

Understanding the technology being implemented in the design of RCIEDs provides the basis for the development of effective countermeasures, both in terms of RF power and also in the development of specific waveforms.

There is a continuous need to keep threat information up to date and to use this library of data to design and develop the most appropriate software for the RF inhibitors.

By combining RF power and software-defined waveforms, the very best antidotes can be created and tested against known threats.
EMC chamber

The purpose built EMC chamber in the ECS Technology Park provides an invaluable tool for testing all aspects of RF Inhibition. All parameters, including RF, can be controlled and measured accurately in the chamber, thereby providing an ideal environment for testing the most complex of threat fills.

The 32m chamber also provides the means to accurately test the performance of antennas as well as testing the effects that the RF radiation has on the vehicle’s electronics and the safety of its occupants. It is by vigorous testing that we can be assured that all Enterprise Control Systems Ltd RF Inhibitors are effective against these threats.

The EMC chamber is also available for hire as a unique pre-compliance test facility.
Antenna design

A key element in the effectiveness of the RF Inhibitor solution is the antenna system design. The concept is to optimise the radiation pattern to maximise protection across the full RF frequency spectrum. By the correct selection and siting of antennas, Enterprise Control Systems Ltd designs antenna systems to achieve the best solution for the application. Research into future vehicle integration is further enabled through testing in the EMC chamber.

Peregrine

Individual ECM Radio Frequency Inhibitor System

The Peregrine I ECM is a small, lightweight, personal jammer used to counter RCIED threats within the HF/VHF/UHF, upper & lower GSM, DECT, 3G, WiFi and ISM frequency ranges. This highly capable equipment weighs less than 1.3 kg (including battery and antenna) and is powered from a Lithium-ion rechargeable battery providing 4 to 5 hours of continuous operation. The Peregrine I ECM is simple to use, with minimal user controls and can be synchronised with other in-service communications and ECM equipment.

The Peregrine I ECM uses sophisticated digital waveform generation technology with up to ten simultaneous target waveforms. The system is fully programmable to provide antidotes for rapidly changing in-theatre Radio-Controlled Improvised Explosive Device (RCIED) threats.
Customer support

The Customer Support team provides technical and operator expertise for customers at the pre-sale stage to discuss their specific requirements. Topics consulted upon include: choice of mule vehicles; auxiliary power consumption and management; concept of operations; threat assessment; battery management, and mission criticality. Customer Support can also undertake installation, commissioning and training on all RF Inhibitors and their ancillaries, and also provide after sales maintenance support.
Delivering World-class Surveillance and Inhibition Capability

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