



## Success Stories:

# Davantis DFUSION Perimeter Security

### Case Study Deployments for:

- Solar Farms
- Construction Sites
- Offices
- Industrial Warehouses
- Residential Homes

## The Technology

# Davantis DFUSION Perimeter Security

### ABOUT DAVANTIS ON SOLAR FARMS

In an era where security threats are increasingly sophisticated, DFUSION by Davantis stands out as a cutting-edge video analytics solution designed to deliver maximum detection accuracy with minimal false alarms.

Powered by advanced artificial intelligence that goes beyond traditional deep learning, DFUSION offers perimeter protection across a wide range of environments, from critical infrastructure and industrial sites to airports, prisons, and high-value residential properties.



### TRUSED GLOBALLY & UK ACCREDITED

Trusted globally with the UK NPSA accreditation, DFUSION protects thousands of kilometers of perimeter across diverse sectors. The following case studies highlight how DFUSION delivers real-world results in challenging environments.



### FALSE ALARMS TRIGGERS RESOLVED WITH DFUSION

Compatible with all major camera types and easily integrated with VMS and PSIM platforms, DFUSION adapts to any site, from small installations to critical infrastructure.

With a dual-engine system DFUSION offers false alarm protection against common causes including... animals, harsh weather, heat spots, trees & foliage, lights, reflection, spiders and insects and more...



National Protective  
Security Authority



# Solar Farm - Midlands

Case Study: Perimeter Security for a Major Midlands Solar Farm

## Client

A Major Midlands Solar Farm

## The Technology

Davantis DFUSION Video Analytics

## The Challenge

CTSG, a specialist in solar farm security across the UK, faced the challenge of protecting a Midlands-based site with a large perimeter and exposure to common false alarm triggers such as wildlife and weather conditions. Reliable detection was essential to maintain effective monitoring and avoid alarm fatigue among operators, especially given the 24/7 surveillance requirements.

## The Solution

To address this, CTSG partnered with Bi3 to deploy the Davantis DFUSION video analytics system, integrated with FLIR thermal imaging CCTV for enhanced detection capabilities. DFUSION's pre-set configurations enabled rapid setup, while its advanced algorithm significantly reduced false alarms. Combined with round-the-clock alert monitoring, the system ensured accurate alerts, improved operator confidence, and strengthened overall site security.

## Integrator



The specific end user has been omitted for security reasons.

# Solar Farm – South of England

Success Story: Perimeter Security for Two New Solar Sites

## Client

A UK specialist in solar energy systems, development, and performance monitoring.

## The Technology

- 89 DFUSION analytics licences
- 25 FLIR FB-Series thermal cameras
- 2 Vaxtor ANPR cameras

## The Challenge

Two new solar farms required reliable long-range perimeter protection with minimal camera infrastructure. Wildlife, new tree planting, and nearby public pathways created a high risk of false alarms. The client also needed secure vehicle access control to prevent theft, especially with roads close to the sites.

## The Solution

Bi3 delivered a combined system using Davantis DFUSION video analytics and FLIR thermal cameras for accurate long-range detection and reduced false alarms.

Vaxtor ANPR was installed at both entrances to automatically check vehicles against an approved whitelist and alert the monitoring station when unrecognised plates appeared.

## Results & Benefits

- Accurate detection with minimal false alarms.
- Reduced number of cameras needed thanks to FLIR's long-range capability.
- Streamlined installation and configuration through DFUSION analytics.
- Lower operational costs and fewer unnecessary call-outs.
- Real-time alerts and strong operator confidence.
- Long-life, low-maintenance system suitable for large solar sites.

### Integrator



The specific end user has been omitted for security reasons.

# Construction Warehouses

Case Study: HS2 Construction Site & Material Storage Warehouse

## Client

HS2 High speed Railway Construction

## The Technology

8x Channels of Davantis DFUSION

## The Challenge

With millions of pounds worth of materials stored at HS2 sites located near busy, high-traffic areas, ensuring robust security was a critical concern. Traditional surveillance alone was not sufficient to detect and respond to potential intrusions quickly and reliably. OCS needed a solution that could enhance situational awareness and reduce the risk of theft or unauthorised access without requiring a complete overhaul of existing infrastructure.

## The Solution

Bi3 partnered with OCS to implement a high-performance video analytics system using Davantis DFUSION technology. By leveraging existing CCTV infrastructure, the solution added AI and machine learning capabilities to deliver real-time intrusion detection. Alerts are sent directly to on-site control rooms, enabling rapid response through ground guards or automated deterrents such as alarms and loudspeakers. This integration significantly improved security efficiency and responsiveness across the HS2 material storage sites.

End User

**HS2**

Integrator

**OCS**

# Office Security

## Case Study - HILTI Office Security

### Client

HILTI - An international manufacturer & supplier of construction equipment.

### The Technology

- Davantis DFUSION Video Analytics

### The Challenge

Atalian Servest, now known as OCS, required a robust and cost-effective CCTV security solution for multiple HILTI sites, including offices, storage facilities, and manufacturing plants. With the need for centralised monitoring and consistent performance across diverse environments, reducing false alarms was critical to maintaining operational efficiency and minimising missed intrusions.

### The Solution

Bi3 partnered with OCS to design and implement a comprehensive CCTV system using Davantis DFUSION video analytics. Chosen for its high detection accuracy and low false alarm rate, DFUSION enabled centralised monitoring and significantly reduced operational costs for HILTI. Over several years, the system has proven to be a reliable and cost-effective solution, delivering strong ROI through reduced Manned guarding and Monitoring costs and enhancing overall site security.

End User



Integrator



# Meat Processing Plant

Case Study - Industrial Warehouse & Meat Processing Plant Security

## Client

Dovecote Park - Meat Processing Plant

## The Technology

- Davantis DFUSION Video Analytics
- FLIR FH-R Thermal Imaging Cameras (Early Fire Warning System)

## The Challenge

A meat processing plant required a comprehensive security and safety solution to protect its perimeter and key machinery. The site faced multiple risks, including potential fire hazards from rising heat and increasing threats from protestors. The system needed to operate effectively across day and night cycles, align with the plant's working hours, and reduce reliance on active patrols—all while integrating with existing infrastructure and on-site monitoring software.

## The Solution

Bi3 deployed a combined solution featuring FLIR thermal imaging for early fire detection and Davantis DFUSION video analytics for perimeter protection. DFUSION was integrated into the existing CCTV network and linked to the on-site security control room through custom software integration. Operating on a day/night schedule, the system streamlined manned guarding by acting as a virtual patrol, thanks to its high detection accuracy. This approach not only enhanced security but also addressed operational concerns around protestor activity and fire risk, delivering a smarter, more efficient safeguarding strategy.

### End User



### Integrator



Dovecote Park Meat Processing Facility

# HNWI - Residential Home

## Case Study - High Net Worth Residential Security

### Client

The Private Estate of a member of the British Royal Family

### The Technology

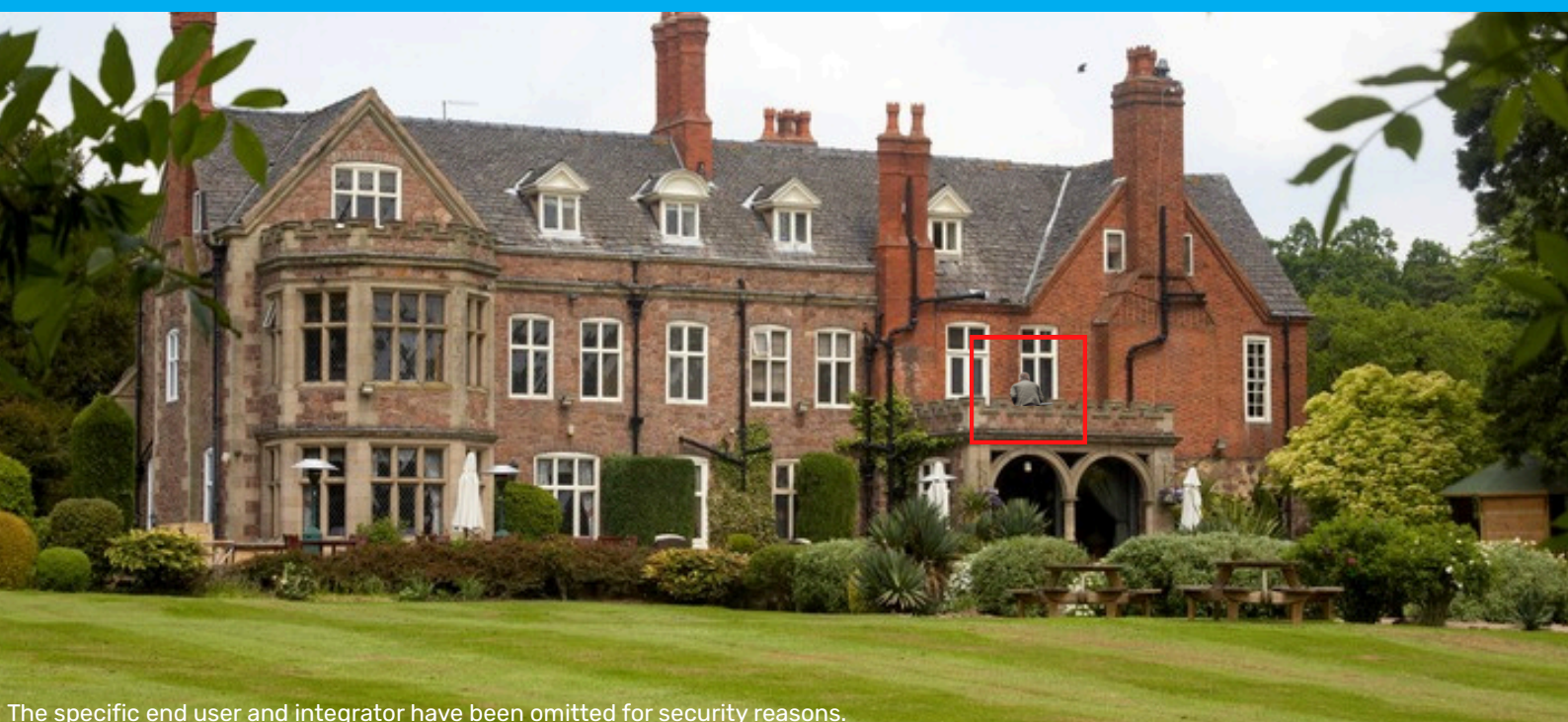
- Davantis DFUSION Video Analytics

### The Challenge

A large UK estate required discreet yet highly effective perimeter protection to safeguard its grounds. The system needed to monitor both long- and short-range open spaces, often obscured by dense foliage and trees, without generating excessive false alarms. Fast and accurate alerts were essential, especially with wild animals and potential pets within the grounds, to allow the family to move to safety and give on-site security teams time to respond effectively.

### The Solution

Bi3 implemented a tailored video analytics system using Davantis DFUSION technology to meet the estate's unique requirements. The DFUSION solution provided reliable detection, and false alarm mitigation from animals, across varied terrain while minimising false alerts from environmental factors. With rapid and precise alarm notifications, the system enhanced the estate's security response capabilities, offering peace of mind and operational confidence for both residents and security personnel. A combined deployment of DFUSION with Thermal Imaging Cameras offered the most practical and effective security solution.



The specific end user and integrator have been omitted for security reasons.



FOR FURTHER INFORMATION



01772 330 777



INFO@BI3.CO.UK



WWW.BI3.CO.UK



"Experts in Human, Vehicle and Object Detection"

Business Insight 3 Ltd, Preston Technology Centre, Marsh Lane, Preston, PR1 8UQ

01772 330 777 Email: info@bi3.co.uk Website: www.bi3.co.uk

Registered in England & Wales No. 8946421 | VAT Reg No: 973 9515 74