



TEMPORARY SURVEILLANCE WHITE PAPER

# SPYNEL

A proven solution for:

- Temporary Surveillance
- Immediate Security
- Rapid Deployment



[www.hgh-infrared.com](http://www.hgh-infrared.com)

#### Headquarters

##### HGH SYSTEMES INFRAROUGES

10 rue Maryse Bastié  
91430 Igny, France

**Phone:** +33 1 69 35 47 70

**Email:** [sales@hgh.fr](mailto:sales@hgh.fr)

#### US Office

##### ELECTRO OPTICAL INDUSTRIES

320 Storke Rd., Ste. 100  
Goleta, CA 93117, USA

**Phone:** 805.964.6701

**Email:** [sales@electro-optical.com](mailto:sales@electro-optical.com)

#### Asia Office

##### ASIA INFRARED SYSTEMS

541 Orchard Rd., #09-01 Liat Towers  
Singapore 238881

**Phone:** +65 6933 1394

**Email:** [sales@hgh-infrared.com](mailto:sales@hgh-infrared.com)

# TABLE OF CONTENTS

**1. Introduction:** The challenges of temporary surveillance

**2. Temporary security applications**

- a. Special Forces & Police interventions
- b. Mobile surveillance for Border Security
- c. Public event monitoring
- d. Construction sites surveillance

**3. The SPYNEL solution**

- a. SPYNEL-M
- b. Mobile Deployment Kit

**4. Conclusion**

# 1. INTRODUCTION

In various sectors, video surveillance and other **security systems** are needed for a short amount of time. It is the case of **major events**, concerts or public demonstrations, **construction sites**, VIP processions, but also urgent and unexpected **special forces** and police interventions.

The two main challenges for these users is to find a flexible system which can be moved easily from site to site and **quickly deployed** anywhere, and to avoid making a significant investment into a permanent system.

To meet these challenges, HGH imagined 360° compact thermal cameras, which can be deployed easily, and a **Mobile Deployment Kit** to ensure the best autonomy and wireless connection in the most remote areas.

In this White Paper, you will discover temporary surveillance in all its forms, as well as the many challenges taken up by [SPYNEL](#).

## 2. Temporary Security Applications

### a. Special Forces & Police interventions

**Special Forces** often face urgent surveillance needs for temporary protection of a perimeter during a mission, before an intervention, to **identify suspects** during intelligence phases, or even to secure a **VIP procession** or VIP escorts.

Mobile surveillance systems can be installed in all the places visited by a VIP during their trip, securing the different areas from several rooftops. SPYNEL also provides waterfront surveillance, protection of ground-based aircrafts, rural or desert areas in the event of an unexpected stop of a VIP convoy. For instance, a helicopter carrying a VIP will need protection that can be deployed quickly during refuelling breaks.

In an increasingly complex environment, special forces continuously adapt the scale and scope of their actions. It is essential that they operate **quickly**, equipped with **autonomous** and **fast** deployment systems which can be controlled remotely.

Temporary surveillance systems are also widely used by the **police** to combat drug trafficking. Installing permanent surveillance cameras to fight against **drug traffickers** is often very expensive and only produces short-term results. Indeed, once the permanent security systems are installed, the drug trafficking starts expanding elsewhere, and dealers are on the move.

Learn more on the Special Forces application: [Download our Case Study](#)



Figure 1  
Multiple human intrusions detection  
on the CYCLOPE interface

## b. Mobile surveillance for Border Security

**Border surveillance** requires tailored solutions for each situation, each type of terrain, each type of threat. Given the dynamic nature of cross border threats, border patrols have developed a mobile strategy surveillance:

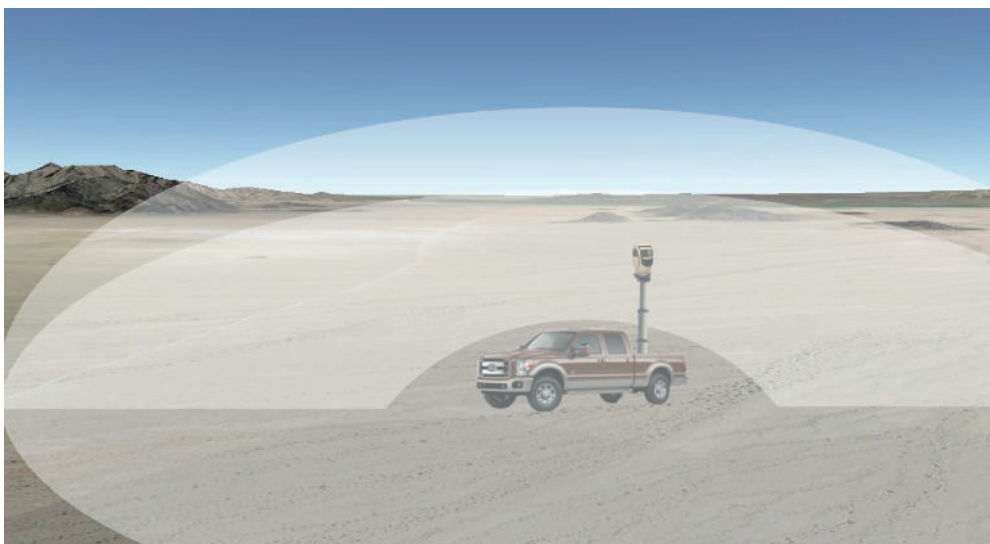
Thermal cameras mounted on extensible masts set up on vehicles come reinforcing the existing systems, filling the security gaps. Compact thermal cameras can be quickly routed to a specific site, which requires immediate monitoring, to detect an imminent threat or to specify the nature of a threat.

The main asset of **SPYNEL** for such an application is that it is **quickly operational**; the system is easy to integrate on a concealed deployable mast at the back of a vehicle or with a hardware kit that can be **dismounted easily**. The real time **panoramic night vision** offered by such a thermal sensor is precious, as the patrol vehicles venture at night in areas with no external light or in treacherous terrain where full awareness on one's surroundings becomes highly valuable.

360° thermal cameras can be used as a **compact standalone system**, providing detection and tracking as well as day and night surveillance, while minimizing installation and integration costs. It can also be easily coupled with a **PTZ camera** and any other security installation.

As mobile as it is flexible, the SPYNEL camera provides a low-cost response to the search for specific threats in border surveillance or targeted inland sites.

Learn more on the Border Surveillance application: [Download our Case Study](#)



**Figure 2**  
SPYNEL mounted on a mast integrated on a Ford F-350  
(CBP vehicle model).

### c. Public Event Monitoring

During **public events**, a large number of attendees gather in the same place in a particular period of time. With the growing risk of **terrorist attacks**, nowadays very real all over the world, security-related equipment and technologies are omnipresent during music concerts, sporting events, fairs, festivals, and other entertainment events.

Security and counter-terrorism strategies are now established as key themes in the staging of public events. Temporary, mobile, surveillance systems are particularly suitable for these types of needs. Fast deployment cameras such as **SPYNEL**, can be combined with existing security systems if a threat is imminent, or can operate as a standalone device.

These mobile, temporary devices are designed to be moved and to be installed just before the event takes place, and uninstalled at the end. Not only are they compact, but they also save money by avoiding the cost of installing fixed security systems. Flexible, they can also be moved during the event, as needed.

Learn more on drone detection with SPYNEL: [Download our Case Study](#)



Figure 3  
Drone detection over a crowded stadium



#### d. Construction sites surveillance

Theft and vandalism cause millions of euros of damage in the **construction sector**, every year. Sites without security systems present a low-risk opportunity for thieves and the consequences can be very serious. When damage or theft occurs, the production process is interrupted, causing **loss of time and money**.

When it is about the surveillance of your construction site, mobile surveillance infrared cameras are a perfectly adapted solution. They can be moved from site to site, and installed on a deployable mast, a rooftop or a scaffold. Acquiring a thermal camera, allowing to detect multiple threats day and night, offering a continuous surveillance of the perimeter, is almost essential to ensure the smooth running of your project.

Thanks to our long-term experience, our advanced **mobile IR camera SPYNEL** is guaranteed to provide you with a tailor-made 24/7 surveillance of any type of construction site configuration.



**Figure 4**  
Human intrusion and tracking

### 3. The SPYNEL solution

SPYNEL-M is the most compact thermal sensor of the SPYNEL family. It is very appreciated for **mobile temporary surveillance** applications, and can be upgraded with the Mobile Deployment Kit for an increased autonomy.

#### a. The SPYNEL-M compact thermal sensor for temporary surveillance

SPYNEL-M is a cost-effective, compact solution for all temporary surveillance needs. This IR sensor benefits from more than 15 years of expertise in major security projects. The high-resolution 360° thermal camera acts as an infrared radar, capturing 24/7 full panoramic infrared images every second. Hardly detectable threats such as UAVs, RIBs and swimmers are tracked in real time. One single SPYNEL-M camera can perform 24/7 early intrusion alerts over a 1.5 km-diameter area, replacing 16 traditional cameras over 360°.

#### Main benefits for temporary surveillance needs:

- Day & night scrutiny
- Easy transport (lightweight)
- Fast deployment (compact)
- Fully passive (undetectable)
- Flexible (deployed anywhere)
- Battery operated
- Panoramic coverage: only one sensor is needed
- Cost-effective

Learn more on [our web page](#)



**Figure 5**  
SPYNEL-M  
Mobile thermal sensor  
12x20 cm - 4 Lbs



**Figure 6**  
SPYNEL-M  
Temporarily deployed on a field



## b. Mobile Deployment Kit

The “**Mobile Deployment Kit**” was designed for SPYNEL-M, to strengthen the autonomy and flexibility of SPYNEL-M, making it even easier to transport and use in remote or hard-to-reach areas.

### The kit includes:

- A battery enabling autonomy for several hours in operation,
- A rugged tablet
- A Wi-Fi connection

With this innovative kit, alerts are directly sent to the **rugged tablet** via a **wireless link**. It allows the user to be mobile and to be assigned to other functions in parallel. Another strong point is the low bandwidth, which allows access to the camera from one or several remote control centers.

With the Mobile Deployment Kit, SPYNEL is fully autonomous and can be **powered by a battery** or a solar panel.

Learn more on [our web page](#):



Figure 7  
Rugged tablet displaying CYCLOPE  
software



Figure 8  
SPYNEL-M on battery

## 4. CONCLUSION

Over the past few years, large scale events have been the target of multiple terror attacks, **transforming our security needs**, requiring ever more advanced and mobile technologies.

Remote missions, VIP escorts, and combat against drug trafficking and organized crimes also require the most stealthy and easy-to-deploy equipment on the market. Special Forces are not the only ones using **rapid deployment infrared cameras**; we have seen that construction sites are often victims of theft, damage or espionage, and that they require day and night temporary surveillance systems as well.

Adequate equipment exist on the market, such as panoramic fast deployment thermal cameras and their **Mobile Deployment Kit** to ensure the best autonomy and wireless connection in the most remote areas.

For more information, visit: [www.hgh-infrared.com](http://www.hgh-infrared.com)



[www.hgh-infrared.com](http://www.hgh-infrared.com)

### Headquarters

#### HGH SYSTEMES INFRAROUGES

10 rue Maryse Bastié

91430 Igny, France

**Phone:** +33 1 69 35 47 70

**Email:** [sales@hgh.fr](mailto:sales@hgh.fr)

### US Office

#### ELECTRO OPTICAL INDUSTRIES

320 Storke Rd., Ste. 100

Goleta, CA 93117, USA

**Phone:** 805.964.6701

**Email:** [sales@electro-optical.com](mailto:sales@electro-optical.com)

### Asia Office

#### ASIA INFRARED SYSTEMS

541 Orchard Rd., #09-01 Liat Towers

Singapore 238881

**Phone:** +65 6933 1394

**Email:** [sales@hgh-infrared.com](mailto:sales@hgh-infrared.com)