

Security and Law Enforcement

In the security and law enforcement fields, maintaining national security is one of the most important missions. Staff must be ready at all times to prevent illegal activity and perform disaster rescue operations.

This section introduces remote visual inspection solutions used to assist security forces and rescue teams.

Visual Inspection Solutions: Defense and Security

Olympus Scientific Solutions



Police and Security Services

Application

With increasing pressures on the prison services, it is vital that staff are properly equipped to thoroughly search all areas of buildings and cells. The concealment of drugs and weapons is a major problem, and many prisoners are finding more sophisticated ways of smuggling and concealing items.

Challenges

- Inspection needs to be performed quickly and with minimum disruption
- Drugs and weapons can be hidden in a very tiny space or large area, and inspection equipment must be small and portable

Solutions

- The IPLEX™ G Lite videoscope supports long exposures and enables clear images even in large spaces such as an attic; these imaging features help reduce the risk of overlooking drugs and weapons hidden in prisons and cells
- Since it is small, lightweight, and can be powered by a battery, the videoscope can be brought anywhere in a prison or a suspicious place in a cell (e.g., wall, ceiling, gap in a roof, toilet, or drainpipe) to inspect for hidden drugs



Recommended Product

IPLEX G Lite videoscope



Customs/Border Control

Application

With so many vehicles (e.g., marine vessels, aircraft) arriving at ports and borders every day, the opportunity to transport goods illegally is almost limitless. Cars, heavy goods, vehicles, and containers are regularly used to conceal an increasing range of contraband.

Challenges

- Videoscopes must withstand harsh inspection environments because customs or border control inspections are usually outdoors and can take place in any weather
- Videoscope illumination must be able to adjust dynamically because inspection targets may vary in size from very small to very large spaces
- Videoscopes must be portable and easy to operate as customs and border inspectors may need many different types of equipment for the same inspection task

Solutions

- The IPLEX™ G Lite videoscope is compact, lightweight, and battery operated for easy transport and handling onboard a vessel or in a vehicle
- With military-grade ruggedness (MIL-STD) and an IP-compliant design, the IPLEX G Lite videoscope is resistant to common harsh environments, while the 6 mm (0.24 in.) insertion tube is waterproof up to a depth of 10 m (32.9 ft.)
- The videoscope supports long exposures and enables clear images, even in large spaces such as diesel tanks on ships; these imaging features help reduce the risk of overlooking narcotics and smuggled goods



Recommended Product

IPLEX G Lite videoscope



Search and Rescue

Application

The search for survivors in collapsed buildings from earthquakes, explosions, or poor building construction is a difficult and dangerous task. Remote visual inspection enables operators to search in cavities through small apertures with minimal debris disturbance. Fire and rescue services use videoscopes to more safely check buildings and to perform searches in accidents where great care is needed in the rescue of survivors.

Challenges

- Search and rescue operations often occur in extremely harsh environments, so videoscopes must be durable and work reliably in any weather conditions
- Operators may need long insertion tubes to navigate complex debris and reach survivors far away from the entry location

Solutions

- The IPLEX™ G Lite videoscope is compact, lightweight, and can be battery-powered, making it possible to search for people who have fallen into the gaps of collapsed houses, manholes, and high-rise buildings; the search for survivors can be performed early during the rescue operation thanks to its portability
- IPLEX G series videoscopes offer insertion tube lengths up to 30 m (98 ft.) with a fully articulated distal end and interchangeable optical tip adaptors; some models also have compatible guide tubes up to 10 m (32 ft.) to protect the scope and increase scope rigidity
- Most IPLEX G series videoscopes are certified to comply with the US Department of Defense testing standards (MIL-STD) and Ingress Protection (IP) standards, and the 8 mm (0.31 in.) scope insertion tube is waterproof up to a depth of 30 m (98.4 ft.)



Recommended Products

IPLEX GT, IPLEX G Lite, and IPLEX GAir videoscopes



Covert Surveillance

Application

To visually identify persons or objects in a confined space without detection, law enforcement operators require visual inspection solutions with an infrared light source and a portable design.

Challenges

- Any visual inspection solution must be highly portable and easy to use to reduce user error or operational delays
- Covert surveillance is necessary to maintain a tactical advantage

Solutions

- The IPLEX™ G Lite videoscope is compact, lightweight, and battery operated for law enforcement tactical operations
- Wireless live streaming on the IPLEX G Lite videoscope enables multiple operators to view the same live image, enabling the team to make critical decisions in real time
- The infrared (IR) LED light source enables the operator to search and monitor the inside of the darkroom covertly; the buttons and screen can be turned off (stealth mode) while wireless live streaming is activated to reduce light emission



Recommended Product

IPLEX G Lite videoscope



Explosives Disposal

Application

Explosive ordinance disposal (EOD) operators may need visual inspection solutions to search for or inspect confined spaces for explosives. The inspection solution can be considered both a safety and operational tool.

Challenges

- There may be a risk of detonation if the suspicious package is exposed to visual light, so EOD operators may need videoscopes with infrared light sources
- Any visual inspection solution must be portable and easy to use to reduce user error or operational delays
- Operators must make real-time decisions by visually observing the condition of explosives

Solutions

- For explosives equipped with a trigger sensitive to visible light, the IPLEX™ G Lite videoscope with an infrared light source may reduce the risk of detonation
- The IPLEX G Lite videoscope is compact, lightweight, and battery operated; it can also be easily installed onto existing robotic platforms
- Wireless live streaming on the IPLEX G Lite videoscope enables multiple operators to view the same live image from a distance of up to 10 m (32 ft.)



Recommended Product

IPLEX G Lite videoscope



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