

PERFECTLY MONITORED.

Mob IDS  
THE SYSTEM FOR MOBILE PROTECTION AND SURVEILLANCE

THALES

# EFFECTIVE SURVEILLANCE IS COMPLETE AND MOBILE.

## Surveillance is a must. But does it have to be expensive?

Wherever, whatever: There are premises that attract dark elements like moths to the light. Goods depots, construction sites, exhibition halls and "sensitive" premises like laboratories and research institutes are just some examples. The fact that such buildings are often only in use part-time does not

make them any the less attractive - on the contrary! The surveillance of such premises can be very cost-intensive, often requiring a large team of personnel. Especially when premises are spread out over a large complex or have "hidden" areas, it seems unavoidable to have patrol guards. The

installation of a highly complex alarm and surveillance system is often not very profitable for mobile plants or plants that only operate on a temporary basis, e.g. on a construction site or an exhibition at a museum. When construction work is being carried out, it is often easier to work

with a larger group of guards than a smaller group with an electronic surveillance system. The crucial disadvantage of such systems then becomes apparent: They are not mobile!

## Mobility in surveillance: Security where it is needed.

The mobile, computer-aided, object-surveillance-system Mob IDS from THALES provides security for buildings, even if they are only temporary or only need protection temporarily. Mob IDS can be used in different topographic and field conditions - and under extreme climatic conditions. This electronic surveillance system can be used with existing security systems to provide a complete solution or can function as an independent system that is quick and simple to install and dismantle. Its high rate of detection guarantees the optimum protection of buildings - inside and out - premises or mobile goods carriers like aeroplanes, trucks or rail vehicles. Surveillance and security personnel will benefit from this electronic back-up system and manpower can even be reduced in many cases.

## Fast reaction means better protection.

Mob IDS is a dependable, flexible technical device that can be used for a vast number of applications. It can significantly reduce the reaction time

of the guards, especially at night and where there is poor visibility, through early warning and targeted alarms. The system comes with basic specifications, which can be expanded by modular sets (sensor equipment, video verification, alarm systems) depending on the object to be monitored and the desired application. The deciding factors here are: - size of the object, degree of danger, condition of premises, visibility, etc.

The basic system includes different sensors - the basic elements of the system - grouped together to enable a very high level of adaptability. Thanks to its modular structure, the system is independent and self-contained right down to each single sensor equipment, and can be used in stand-alone mode too. Mob IDS has the potential for unlimited expansion - the segmentation being restricted only by the number of detection and alarm components.



# COMPUTER-AIDED SURVEILLANCE OF OBJECTS THAT ARE WORTH PROTECTING: MOB IDS

## Security in a modular System.

Mob IDS is the ideal solution for companies of different orientations for short-term (from hours to a few days) and medium-term (from days to a few months) surveillance of high-risk objects. It is suitable for:

- security and surveillance companies
- police, border surveillance, disaster prevention
- storerooms, multi-storey car parks, shipping and loading companies, forwarding agents
- research institutes, laboratories
- fair and exhibition companies
- concert and festival organizers, promoters
- power plants, energy suppliers
- construction companies
- airport authorities
- financial service companies (banking containers).

The mobile computer-aided surveillance system Mob IDS has a modular design. The basic system consists of commercial off the shelf products, can be quickly and easily assembled and is easy to maintain by exchanging assemblies as required. It ensures a detection rate of more than 96 %.

The entire system has been designed so that the customer can install it

himself simply without making mistakes. The devices are suitable for use in all outside conditions.

## Simple structure for highest vigilance.

An essential advantage of Mob IDS is the simple, clear and logical structure. The system consists of only a few core components:

- sensors
- effective components
- universal sensor-box
- central alarm station
- central alarm station box
- accumulator-box
- video equipment

The video equipment can be used autonomously or in conjunction with individual sensor sets.

It can be combined with the sensor equipment. Each sensor-box can be connected to up to two sensors and, simultaneously, two effective components of the audio-visual alarm equipment (sirens, loudspeakers with speech-module, searchlights and stroboscopes).

All effective components can be controlled by the central alarm station or directly by the sensors. A wide variety of sensors can be connected to the sensor-box (laser scanner, microwave

sensors, ground sensors, fence sensors etc). Because of the universal interface, even sensors that are not yet included in the present equipment, can be integrated into the system.

## Controlled by intelligence.

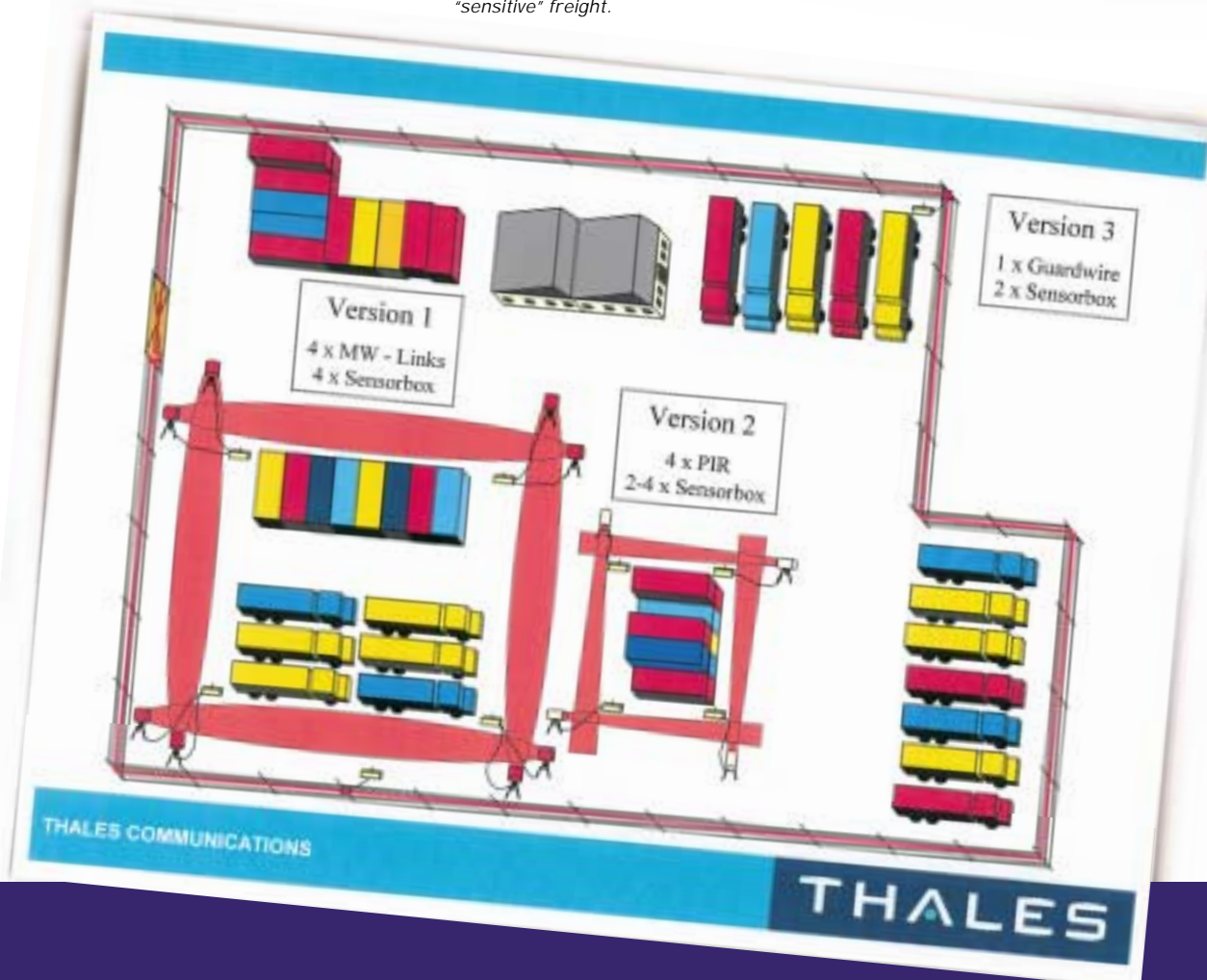
The sensor-boxes are the central components of the system; they contain the intelligence to process all sensor messages and to activate the effective components. Interfaces for the bi-directional transfer of information via

radio or wire are integrated into the sensor-boxes. Thanks to this solution, the connection of optical and/or acoustic effective components to each sensor-box is possible without the need for additional radio lines.

Each loudspeaker-box has a socket for two speech-modules to increase the application flexibility. With the separate

recording unit, which is part of the central alarm station, you can record warnings and instructions. The loudspeakers can be connected to any sensor-box and play the recorded warnings when activated. With this solution it is possible to create further acoustic warnings at each sensor-box quickly and simply, without replacing any components

Monitoring diagram for a lorry park for goods vehicles with "sensitive" freight.



Complete indoor surveillance by video.

# YOU CAN ONLY HANDLE IT, IF YOU CAN SEE IT.

## Optimum support for guards.

When the system is installed, loudspeakers or sirens, searchlights, stroboscopes or similar equipment can be connected to the outputs of the sensor-boxes. They signalize the detection behaviour of the connected sensor. This enables the creation of a fully functioning mini-system consisting of sensors, a sensor-box, accumulation-

box and effective components. This system can form a self-contained surveillance system, independent of the overall central alarm station equipment.

An integrated microprocessor takes over the control duties in the sensor-box, analyses the sensor signals and transfers them to the radio or cable

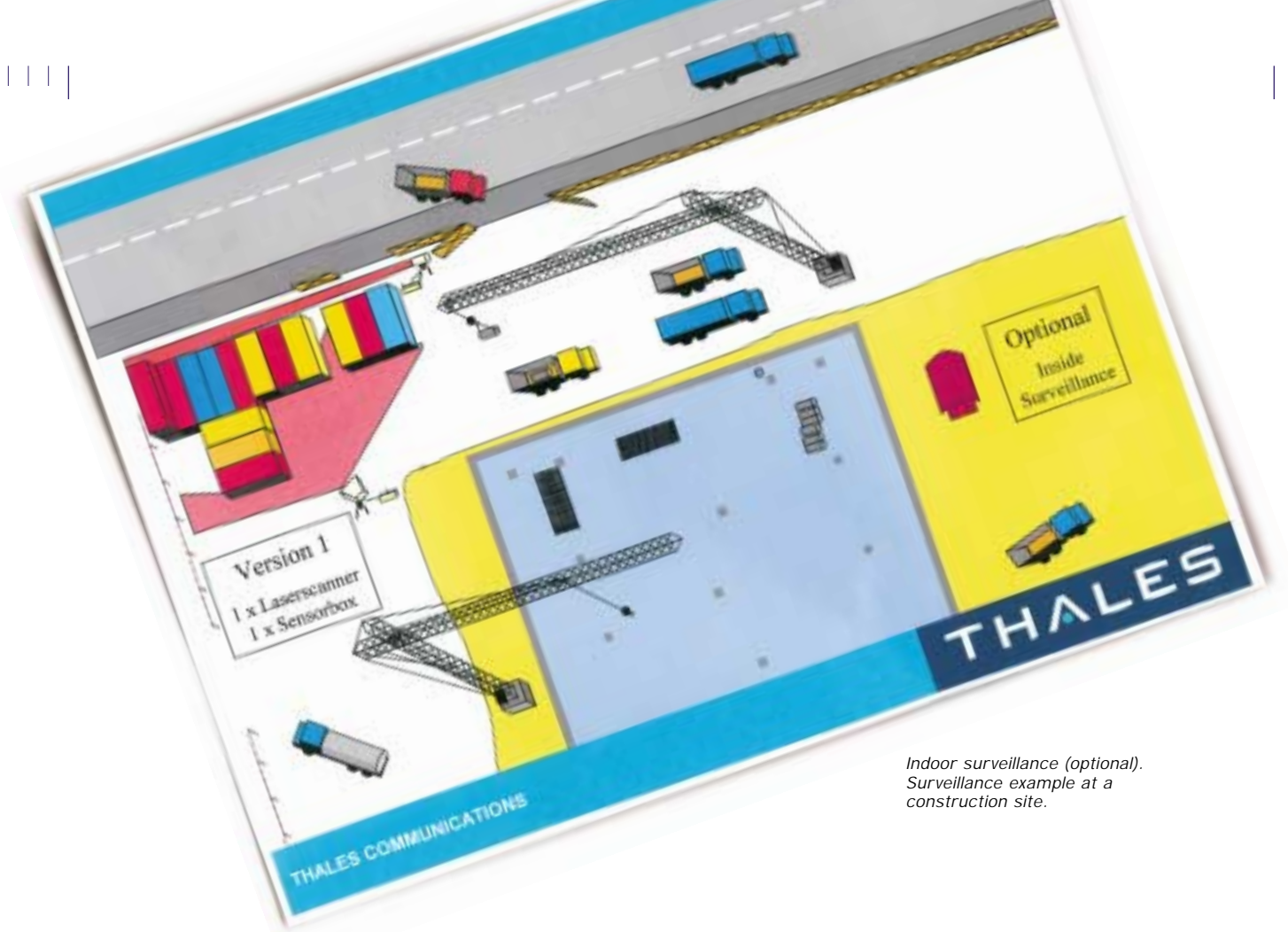
interfaces. The use of the microprocessor makes it possible to define new functions at a later date and to integrate them into the transmission.

A MAA-box is used as the counterpart in the central alarm system. It receives the messages transmitted by the sensor-boxes and activates the effective components. An integrated microprocessor evaluates the signals received and transmits the data to the management system.

## Autonomous power supply.

The connected sensors receive their power via standardised connecting cables. The sensor-boxes are designed to take over the power supply. There is only one cable required to connect the sensors and the sensor-boxes. The power is supplied to the sensor-boxes at either 230V~ or 12V=. To enable the connection to a vehicle with 24V= voltage, the sensor equipment sets are equipped with a voltage transformer and the corresponding connection cables. The accumulator-boxes enable an autonomous operation of at least 24 hours, up to several weeks.

*The information is gathered in the central alarm station; all necessary actions are co-ordinated and initiated here.*



*Indoor surveillance (optional).  
Surveillance example at a  
construction site.*

## Safe communication for safe surveillance.

To ensure uninterrupted operation when the accumulator-boxes are exchanged, each sensor-box is equipped with two 12V ports. This power supply concept provides an accumulator buffer while the system is connected to the power supply. Furthermore the connected accumulator-boxes simultaneously receive a compensation charge.

Stroboscopes, searchlights and sirens - the effective components of the optic-acoustic alarm unit - are always connected to a separate accumulator-box. Only the loudspeaker gets its power supply via the connection cable to the sensor-box.

This concept ensures the complete exchangeability and safe transmission - available via radio, wire or in a mixed operation. The use of sensor-boxes makes it possible to send the alarm signal to the central alarm station, whilst enabling the optic-acoustic effective components to be activated by the central alarm station. If radio controlled equipment is in use, for example, this means that if a guard receives an alarm signal, he can reciprocate by activating an effective component.



# ARMY-PROVEN SURVEILLANCE TECHNOLOGY FOR THE CIVILIAN MARKET.

## Proven on the toughest missions.

Mob IDS is a system that was designed and developed for use by the German army. There the system proved itself even on missions abroad and under extreme conditions (KFOR and SFOR). Companies and institutions that use Mob IDS in civilian areas can also benefit from the performance specifications required for military:

- sensor technology that is quick to initiate
- multiple use of investments
- reusability
- simple set-up
- minimum cabling required
- autonomous power supply
- alarm on the spot and/or via the central alarm station
- transmission of alarm signals via radio
- simple display in the control station
- control station with site plan drawing

### Information via radio: universal and fast.

The radio transmitting system in particular plays an important role in the overall concept. An intelligent radio network carries out the communication between the sensor-boxes and the central unit.



*The military version is already successfully used by the German Army.*

The frequencies used are within the VHF-band. A power output of 6 Watt is provided to reach the required range of 2 km on standard terrain. Both the central unit and the sensor-boxes are equipped with microprocessors. They take over the addressing and the handling of the protocols. The sensor-boxes automatically recognise connected sensors (microwave, PIR, sensor cables etc.) and transfer the available information like "alarm", "sensor triggered", "sensor in pause mode", "tamper" and an "operating and failure message" to the central unit.

### Self-monitoring technology for constant surveillance.

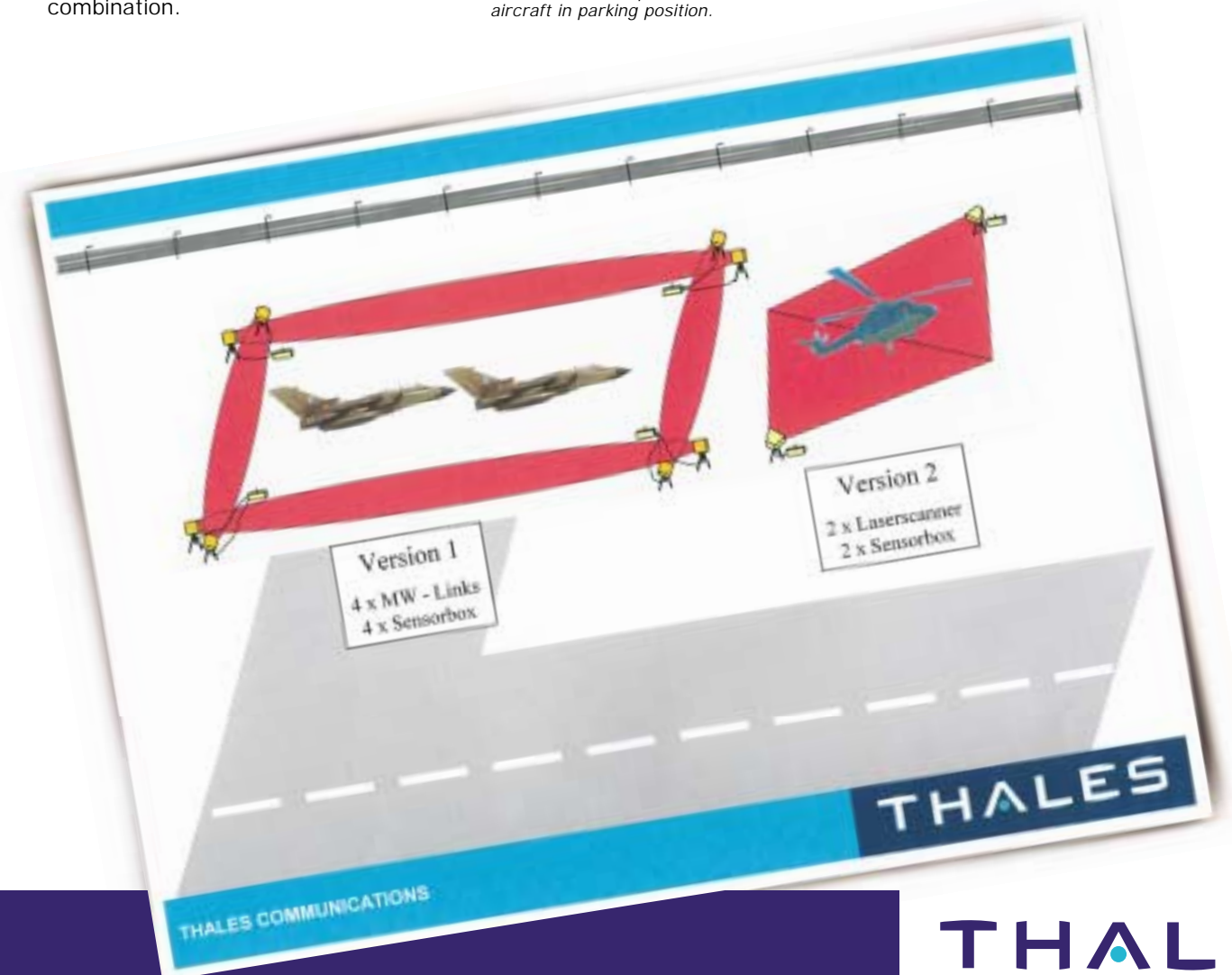
To increase the operating safety and interference resistance, the system uses a special query process. The presence of all radio operated units is checked in cycles. The standard configuration for the interval between checks is 30 minutes. This "interrogation" process provides a continuous inspection of the overall efficacy of the system; e.g. the removal of an antenna or destruction of a sensor-box by a potential perpetrator will automatically trigger an alert. A special protocol is used to transmit the data via radio. This protocol contains the addressing, sensor coding and messages as well as the status reports. Extra attention was given to the following points when the radio transmission was designed:

- universal application
- no loss of messages during simultaneous messages
- bi-directional radio system to activate effective components
- cyclic check up of all radio operated units
- secure data transfer
- option to connect any kind of sensor

### Secure what has to be secured. The solution is Mob IDS.

Mob IDS provides you with a modular system that can be expanded to meet your growing demands and offers an extremely safe investment. It supports you in all of your surveillance tasks for plants, buildings, areas and mobile goods. The greatest advantage of Mob IDS is its mobility in conjunction with very high effectiveness - an ideal combination.

*Surveillance example for aircraft in parking position.*



## Mob IDS. Security with system.

- mobile security system for surveillance of sensitive military and civilian objects
- reusable for temporary protection
- data transmission via radio or wire
- no cabling necessary
- multifunctional application of system technology
- fast installation and set-up
- free choice of sensors
- expandable to meet different requirements (up to 3000 sensors)
- displays anything from simple signals right up to central management system with site map
- can be expanded to include video surveillance (radio or wire)
- modular units are interchangeable (modular construction system)

### Technical data

<b>Power supply</b>	12 V DC or 24 V DC or 230 V AC or with voltage transformer from each vehicle
<b>Radio frequency</b>	136 MHz up to 162 MHz 4 pre-selectable frequencies
<b>Transmission output</b>	up to 6 W adjustable
<b>Degree of protection</b>	IP 54 safety checked according to EN 60 950

Qualitätsmanagementsystem



DQS-zertifiziert nach:  
DIN EN ISO 9001:2000  
Reg.Nr.: 408



ZERTIFIKAT

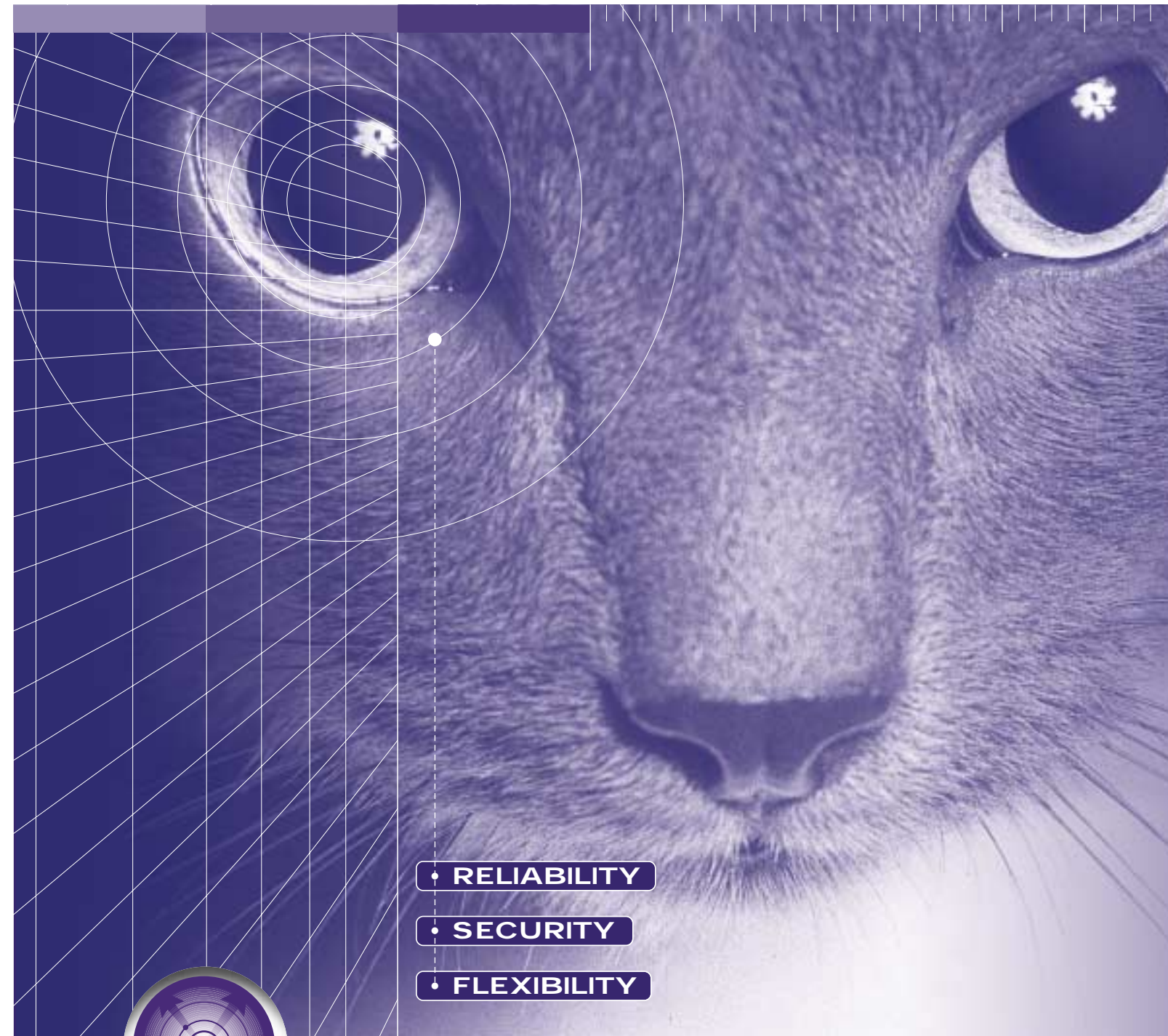


**THALES**

SOLUTIONS FOR A WORLD OF CHALLENGES

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• RELIABILITY

• SECURITY

• FLEXIBILITY

## Mob IDS

THE MOBILE SURVEILLANCE SYSTEM.  
IT MISSES NOTHING!

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