

MONITORING SOLUTIONS FOR

Fire & Security



### SMART MONITORING SOLUTIONS FOR INTELLIGENT ASSETS

### Informed decision making from integrated monitoring at all points on your critical infrastructure

Kifta has worked together with customers and partners for more than 5 years to develop monitoring solutions to enhance the safety and security of your critical infrastructure and personnel.

Our range of fiber optic monitoring instrumentation combined with our smart software and services provide you with the right information at the right time to detect risks early.

Kifta's solutions enable swift decision making and help you to minimize damage, avoid catastrophic failure and to reduce financial, environmental and reputational risk.



MORE THAN 50 INSTALLATIONS WORLDWIDE



1,000KM OF INSTALLED FIBER BEING MONITORED



MTBF\* OF OVER 31 YEARS FOR KEY COMPONENTS

\*MTBF - Mean Time Between Failures



## THE BENEFITS OF INTELLIGENT MONITORING

Feature	Benefits
Feature	Benefi

DAS monitoring for Third Party Intervention (TPI) detection before the event occurs, whether it is malicious (terrorist or product theft) or accidental (3<sup>rd</sup> party digging)

Precise, real-time and actionable information at all points on your asset

Smart configurable alarms - early rate of rise detection

Passive optical components, no electronics or moving parts

Temperature monitoring information - dual use for ventilation control

Utilize existing telecoms infrastructure working closely with telecoms/SCADA installer

- Prevention of theft, improved safety, lower maintenance and lower repair costs
- Rapid and focused decision making which improves custodianship over assets thus reducing risk to reputation damage
- Early detection of fire prevention of damage to assets and protection of personnel
- Low maintenance and low cost of ownership suitable for use in ATEX areas
- > Low cost of investment for assets
- > Ease of installation, lowering overall cost of ownership



## FIRE & SECURITY MONITORING APPLICATIONS

### > Transport

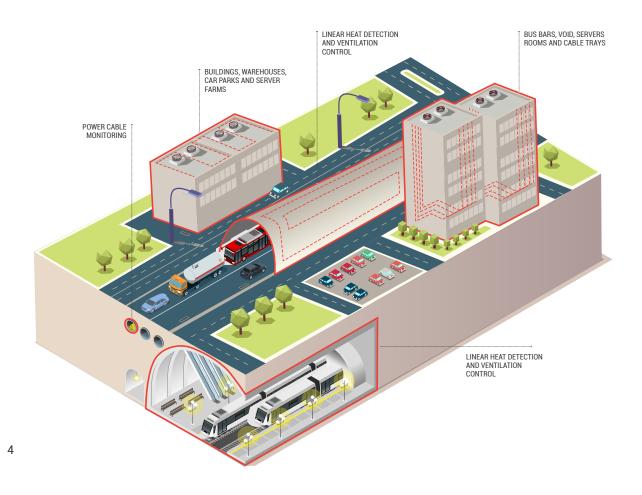
- Airports linear heat detection and perimeter security (PIDS)
- > Tunnels linear heat detection
- > Roads
- > Rail and metros
- > Parking garages

#### > Power

- > Cable trays and tunnels linear heat and access
- > Transformers and switchgear linear heat
- > Substations perimeter

### > Petrochemical

- > Refineries and storage tanks perimeter security (PIDS)
- > Offshore platforms heat
- > Warehousing and storage
- > Mining and minerals conveyor belt





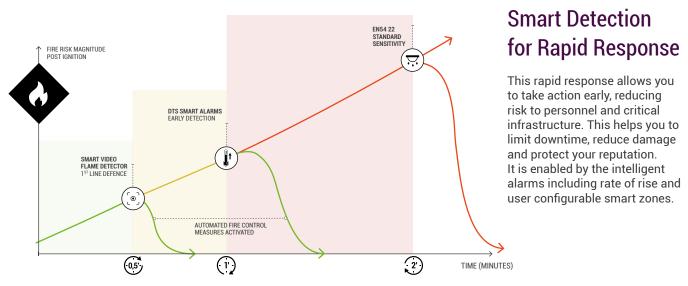
# INTEGRATED INTELLIGENT FIRE PREVENTION MONITORING

› Kifta's range of fiber optic linear heat detection and smart flame detectors provide complete coverage and security for your critical infrastructure and personnel.

Linear heat detection systems are an established form of defence in special hazard situations. Kifta's Firelaser and Access range of fiber optic DTS linear heat detection systems are uniquely designed to detect fires significantly faster than conventional technologies.

These can be combined with Kifta's ViVid range of smart flame detectors to provide complete coverage at all points.

#### INTELLIGENT EARLY DETECTION REDUCES RISK



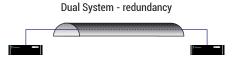
### TECHNOLOGY TO SIMPLIFY AND IMPROVE RELIABILITY

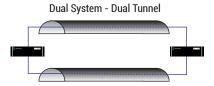
› Kifta systems are designed with simplicity of installation in mind and to maximize reliability and redundancy options.

**Examples of redundant System Configuration** 

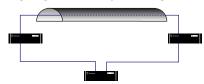
Single system loop configuration







Long Range Tunnel - Tri system configuration



### Reliability and redundancy

With their passive components and no moving parts (all Kifta instruments are fan free), fiber optic DTS linear heat detection systems are inherently low maintenance. Kifta designs and tests its systems to the highest international standards and utilizes components with an MTBF of > 30 years.

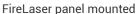
When you combine this approach with the redundancy achieved through system design, you achieve the most reliable systems in the industry.

### Ease of installation and system integration lowers cost of ownership

The Kifta Firelaser and Access DTS are designed to be simple to install and are versatile in configuration with multiple options for physical configuration and system integration.

- > Pre-connectorized cables no onsite splicing required
- Panel and rack mounted available for versatile location placement
- Integration with multiple systems including SCADA, Relays, Modbus and customized for proprietary customer specific protocols







ViVid Flame Detector



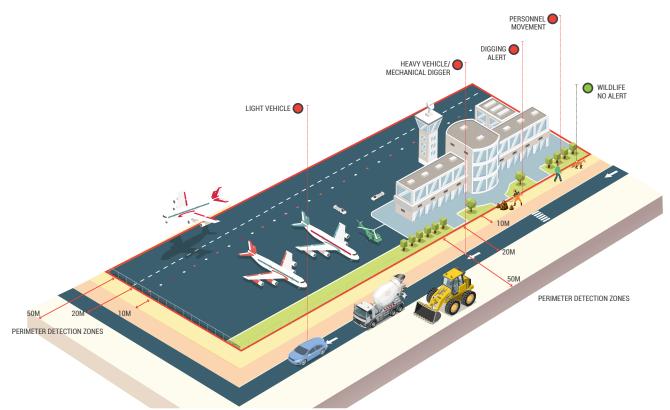
Pre-connectorized cable lengths

# PERIMETER MONITORING FASTER THAN THE SPEED OF SOUND

With the Horizon Distributed Acoustic Sensor (DAS), Kifta is able to provide a Perimeter Intrusion Detection System (PIDS) to provide early warning of any intruders.

The Kifta Perimeter Intrusion Detection System (PIDS) combines Kifta's Horizon Distributed Acoustic Sensing (DAS) system with its smart software measuring perimeters and borders up to 100km per unit:

- > Intelligent event classification engines
  - Minimize nuisance alerts distinguish between personnel, wildlife and environmental factors
- Maxview system integration platform integrates across multiple sites and can pull in multiple sensors and feeds as well as cue other systems (video cameras and rapid response units)





- Complete coverage of assets pinpointing the location of any incident within 5m
- High probability of detection with a very low probability of false alarm activations
- System integration with 3<sup>rd</sup> party sensors and data feeds to provide total domain awareness over the whole infrastructure



