

Patol is an industry leader in the design and manufacture of specialist fire, smoke and heat detection products, supplying fire safety solutions for industrial applications. Patol has considerable expertise in the design, manufacture and supply of specialist fire safety products and services, such as Linear Heat Cable and Aspirating Smoke Detection. The particular requirements of national standards, client specifications or project needs are a standard aspect of Patol's design & engineering service. Patol's expertise ranges from discrete military vehicle monitoring modules through to multi-discipline systems covering all fire protection, process control and security aspects.

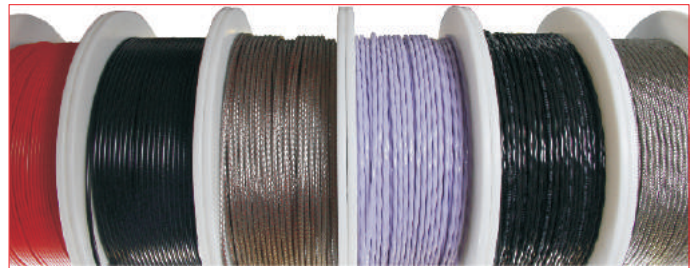


### Key Features (Analogue Linear Heat Detection Cable LHDC)

- Adjustable Alarm set point
- Recoverable and resettable operation
- Can detect hot spots
- Zones of up to 500m in length
- Mechanical & Chemical protection available
- Easy to install
- Compatible with a full range of monitoring devices
- RoHS compliant — Lead Free

### Applications

- Adjustable Alarm set point
- Cable Tunnels, Ducts & Mezzanines
- Escalators & Moving Walkways
- Petro-Chemical Storage Tanks / Rim Seal Protection
- Paint Shops & Spray Booths
- Conveyors - Coal, Biomass, Sulphur. etc
- Ceiling Voids & Attic Spaces
- Road & Rail Tunnel Carriageways
- Nuclear Reactor Plant Areas
- Refrigerated Stores & Cold Rooms
- Electrical Control & Switchgear Cabinets
- Warehouse High Rise Pallet Racking
- Oil Rigs & Off Shore Platforms
- Fume Cupboards & Glove Boxes
- Grain Silos & Agricultural Storage
- Road / Rail Vehicle Engine Compartments
- Steam pipe Leaks & Trace Heating Faults
- Product Lines - Flanges, Valves & Pumps
- Computer Room under Floor Cable Voids



### Digital Linear Heat Detection Cable LHDC

#### Key Features

- SIL 2 Approved when used with
- LDM-519-DIM or LDM-519-DDL module.
- UL Listed.
- UV and Chemical Resistant.
- Early Detection of hazards at temperatures well below flame point.
- Rugged construction—Stainless Steel outer armour available.
- Fixed Alarm Trigger Temperature.
- Compatible with many existing zone monitors / Control Equipment.
- Intrinsically Safe Configurable for Hazardous Areas.



### Fibresense – Fibre-Optic Linear Temperature Sensing

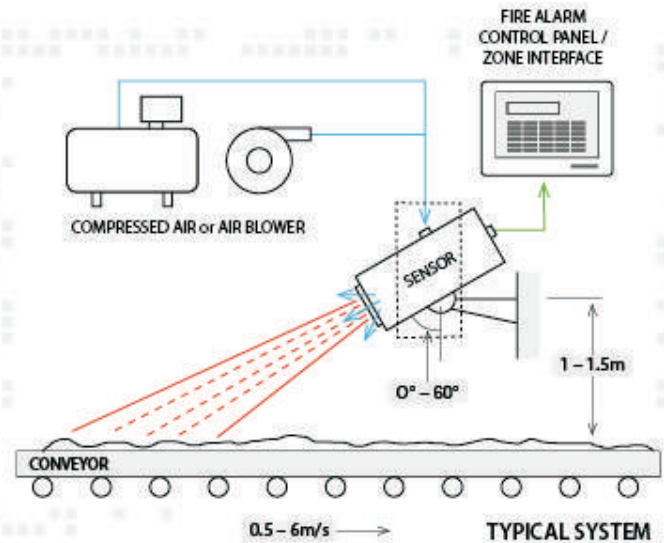
#### Benefits

- Fast, reliable, fibre optic heat detection by LTS (Linear Temperature Sensing) technology
- Maintenance-free robust sensor cable ensuring low through-life ownership costs
- Comprehensive functionality with user programmability
- Ease of installation and communication with existing control system
- Applications include the monitoring of vessels, Car Park protection, automatic storage warehouses and power cable trays.

## Infra-Red Transit Heat Sensors



Patol infra-red transit heat sensors are designed to trigger an alarm if the material they are monitoring exceeds a temperature of 100°C. Sensitivities can also be set above this threshold. The sensor triggers at temperatures below flame point including both embers and buried hot spots. Material being transported can be monitored on conveyor systems running at speeds of between 0.5 and 6m/s.



## FireTIR System



The Fire Thermal Infrared (FireTIR) detection system is based on fixed infrared cameras which measure the viewed surface temperatures in real time and connect to a user friendly software interface

## System Features

- Wide-area monitoring.
- Fast and precise temperature measurement.
- Captures the temperature distribution of a surface in milliseconds.
- Definition of alarm zones and related temperatures.
- To avoid combustion of materials as a preventative measure.
- Precise, accurate temperature detection.
- Cameras are equipped with self-calibration.
- High resolution temperature measurement over long distances.
- Customized system design and architecture.



## Special Control Equipment & Services



This expertise ranges from encapsulated electronics units installed in military vehicles through to multiple bay equipment cabinets integral to the control rooms of power stations, process plants and petro-chemical facilities.



## Employed in Applications

- Power generation
- Heavy industry
- Underground rail systems and tunnels
- Conveyors
- Escalators
- Food process industry
- Waste recycling plants
- Petrochemical and tank storage

## Functional Features and Constructional Criteria

- Mimic displays
- Special enclosure – design and fabrication
- Industrial/military – control modules
- Anti-vibration mounts
- EMC compliance
- Environmental protection – IP/NEMA ingress ratings
- Special paint finishes