



## **DELTA 6 SERIES**

Linear Fire Heat Detector

| Adjustable | Reliable | Super Fast | Robust |



Advanced fire protection systems



Advanced fire protection systems

With over 60 years' experience, Lehavot has long been recognized pioneer and leading provider of high quality Fire Protection systems. Incorporating the most advanced technologies, LEHAVOT's best of breed solutions have proven themselves in every level of fire protection application.

Today, LEHAVOT's tailor-made solutions help global customers meet the challenges of the 21st century, delivering superior performance over a long service life at the most competitive price.

### Our Advantages - Operational Efficiency & Outstanding Reliability

LEHAVOT's products benefit from decades of expertise and experience in the development, design and manufacture of Fire Protection Systems. Our wide range of state-of-the-art solutions provides the highest operational efficiency and utmost reliability, offering unequalled operational quality.

### Environmental Considerations

LEHAVOT's dedication to its customers is matched by our commitment to the environment. Our comprehensive systems solutions maximize fire agent efficiency, and we are constantly searching for new and better manufacturing materials and methods to ensure sustainability. As a result, LEHAVOT products comply with the most stringent international standards and approvals such as FM, UL, EN, CE, MIL specs, and other.

### Customized Solutions + Global Presence = Peace of Mind

Powered by decades of intensive interaction with the world's major end users, LEHAVOT's proven products have been carefully customized to meet the requirements of global customers such as Reliance, IOTL, Navistar and many others, in the following applications:

- Buses & Trains
- Kitchen-Hood systems
- Oil & Gas tank storage protection
- Off-Road vehicles (Mines, Agriculture, etc)
- Marine
- Crane
- Conveyors
- Cellular antennas
- CNC machines
- Military



LEHAVOT's global presence provides customers with real peace of mind. With a worldwide network of subsidiaries and international distributors, the company's reputation has been established through a commitment to top quality sales & post sales service supported by teams of highly trained & dedicated professionals.



### Automatic Fire Protection Systems by Lehavot



#### **BUSShield**

Fire Protection for Buses



#### **OIL-TANKShield**

Fire Protection for Oil & Gas Storage Tanks



#### **KITCHENShield**

Fire Protection for Industrial & Commercial Kitchens



#### **DEFENSEShield**

Fire Protection for Military Applications

## DELTA - Linear Fire Heat Detector

DELTA, a pneumatic-electronic linear fire detector, analyzes the rate of temperature rise within monitored regions to confirm the presence of a fire or overheating. It senses the fire via stainless steel tubing routed within the protected zone, providing optimal detection coverage.

- Adjustable Sensitivity
- Reliable
- Super Fast Detection
- Robust

The DELTA measures and analyzes the Rate of temperature Rise (RoR) as well as, measuring the absolute temperature change above ambient conditions, while enhancing fire detection reliability.



The DELTA is compatible for both commercial and military applications.

Commercial: Public transportation, Off-road, Agriculture, Machineries, Generators rooms, CNC, Tunnels and Buildings.

Military: Single-zone protection for a wide variety of land vehicles and marine vessels.



## Features and Benefits

- Fast Detection - Detects fire in under 1 sec.
- Distant Sensing - Identifies fires occurring a distance from the sensor tubing
- Robust & Durable - Tolerates grime, dirt, and extreme conditions
- Built-In-Test (BIT) capability
- Patented Technology

# DELTA 6 SERIES

## Adjustable and Accurate

A highly accurate and sensitive mechanism detects direct and indirect fire exposure, while sensor sensitivity can be calibrated according to zone environmental conditions. Fire events, faults and signal peaks are stored in the detector's Non-Volatile Memory, and can be downloaded at any time through a USB interface.

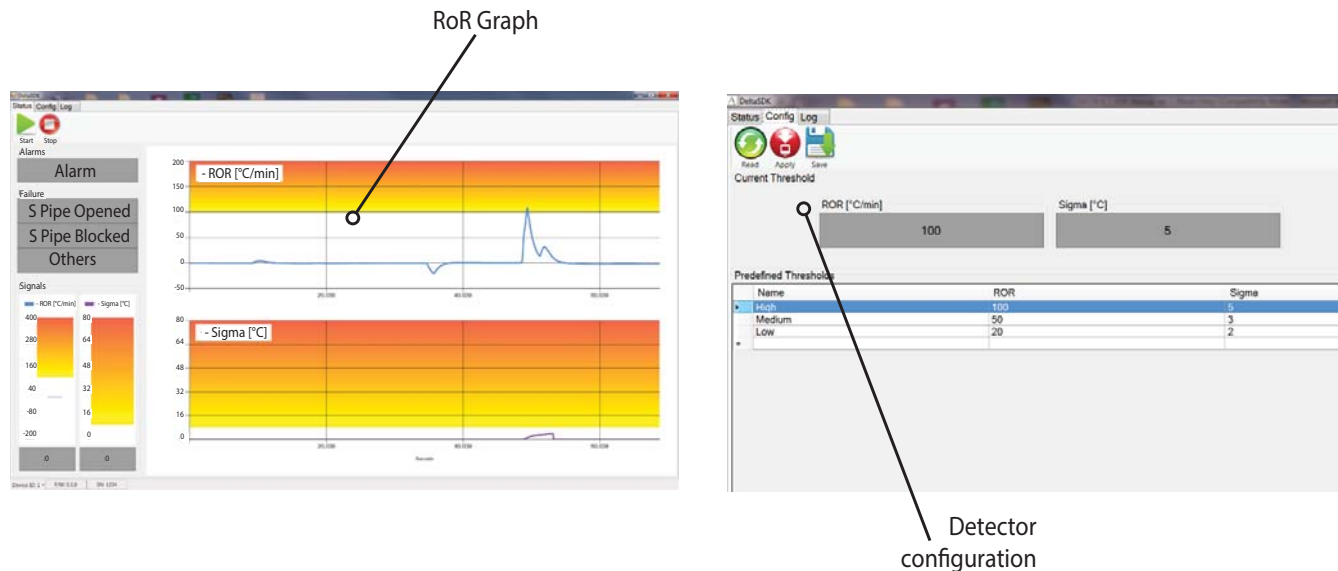


## What is a Rate-of-Rise Detector?

A heat detector responds when the temperature rises at a rate exceeding a predetermined value. The Rate-of-Rise heat detector operates on a rapid rise in element temperature over time, irrespective of the starting temperature

### Example:

A temperature change of 10 degrees per second has a different interpretation than the same change over 3 hours

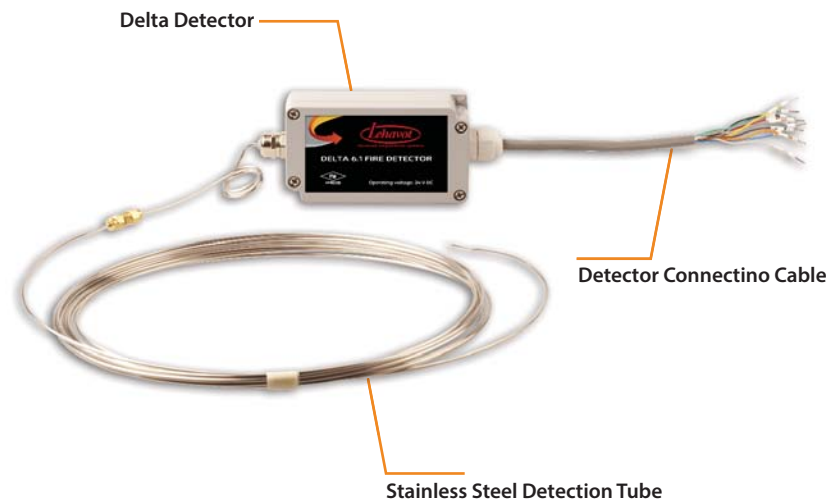


## Predefined Threshold:

The DELTA detector's internal thresholds can be configured to required values driving a "Fire Alarm" relay accordingly.

## System

- Adjustable heat detection range
- Recordable fire event memory
- Detector Connection Cable
- Fire Alert
- Fault Alarm
- Communication
- Agent activation
- Stainless Steel Detection Tube
- Withstands extreme environmental conditions
- Rated for temperatures of 1,000°C/1,832°F.
- Supplied to up to 100m long



## Delta AVI

The lightweight, compact, and user-friendly Delta 6.x AVI, combines the DELTA detector as well as audiovisual indications, providing a complete detection, alarm and activation solution in one unit. The built-in visual and audio alerts include: Fire Indication / Fault Indication / Power Indication.

## Certificates

- **ISO 9001:2008 - Quality assurance certification**
- **FM 3210**
- **EN54**

### Military Standards:

- **MIL-STD 810 - For environmental conditions**
- **MIL-STD 461 - For electromagnetic compatibility**
- **MIL-STD 1275 - For Characteristics of 28V DC electrical systems in military vehicles**



ISO  
9001:2008



FM-APPROVED



Military  
Std 810



Military  
Std 1275, 461, SAE  
J1113



EN 54 Certified

# DELTA 6 SERIES

## DELTA 6 - Advanced Linear Fire / Overheat Detector Specifications

<b>Electrical Input</b>	Voltage Range	18-32 VDC (complies with MIL-STD-1275)
<b>Current Consumption</b>	Standby	20 mA
	Alarm	40 mA
	BIT	400 mA for 1.5 sec duration
<b>Detector Interface Options</b>	Option 1: 4 Wire BUS	Vin: 24Vdc, GND, RS-485-A, RS-485-B
	Option 2: 3 Wire EOL Resistor	Vin 24Vdc, GND Signal :Normal-5k, Alarm-220 $\Omega$ , Fault - 820 $\Omega$ *
	Option 3: 4-6 Wire Connection	Vin 24Vdc GND Alarm: Relay or Open Collector (N.O) Fault : Relay or Open Collector (N.C)
<b>Extinguishing Activation</b>	Current Source	Up to 2 Amp (Optional)
<b>Environment</b>	Operational Temperature	-40°C to 125°C (-40°F to 257°F)
	Storage Temperature	-40°C to 125°C (-40°F to 257°F)
	Shock & Vibration	Complies with: 1. MIL-STD-810: 501.4, 516.5.4 2. BS EN 61373 : Tables 1,2,3
<b>Enclosure</b>	Aluminum	IP 67 protection
<b>Detector Integrity Check</b>	Built-in Test	Physical and electrical
<b>Tube</b>	Length	1m- 100m
	Outer Diameter	2mm
	Material	Stainless Still
<b>Size &amp; Weight</b>	Dimensions	115*64*34.5 mm (W*H*D)
	Weight	390 grams (excluding tube)



## DELTA AVI - Integrated Control and Detection Unit Specifications

<b>Electrical Input</b>	Voltage Range	18-32 VDC (complies with MIL-STD-1275)
<b>Current Consumption</b>	Standby	20 mA
	Alarm	40 mA
	BIT	400 mA for 1.5 sec duration
<b>Detector Interface Options</b>	4-6 Wire Connection	Vin 24Vdc GND Alarm: Relay or open collector (N.O.) Fault: Relay or open collector (N.C.)
<b>Environment</b>	Operational Temperature	-40°C to 125°C (-40°F to 257°F)
	Storage Temperature	-40°C to 125°C (-40°F to 257°F)
	Shock & Vibration	Complies with: 1. MIL-STD-810: 501.4, 516.5.4 2. BS EN 61373 : Tables 1,2,3
<b>Enclosure</b>	Aluminum	IP 67 protection
<b>Detector Integrity Check</b>	Built-in Test	Physical and electrical
<b>Tube</b>	Length	1m-100m
	Outer Diameter	2mm
	Material	Stainless Steel
<b>Size &amp; Weight</b>	Dimensions	185x64x40 mm (WxHxD)
	Weight	550 grams (excluding tube)
<b>Visual Indicators</b>	Power	Green LED
	Fault	Yellow LED
	Fire Alarm	Red LED
<b>Audio</b>	Fire Alarm	Buzzer





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