



GROVELEY DETECTION

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Stand Alone Imaging Based Flame Detector **FDS301**

The FDS301 is a colour imaging based flame detector. Each detector operates stand alone and incorporates an integrated CCTV system; digital signal processing and software algorithms to process the live video image and interpret flame characteristics.

These unique software algorithms are capable of discriminating between genuine fire conditions and other radiant sources that may cause other detectors to become desensitised or produce unwanted alarms.

Each unit provides local colour video data and fire alarm/fault signalling to the control equipment. The detectors can provide the operator with full display and alarm handling facilities and will interface to the main installation control facilities and the site security system.

The surveillance aspect of the detector eliminates the need to dispatch operators to investigate alarms as the live video images are viewed directly in the control room. This reduces the risk of injury to operators and improves response time.

The colour video image can be recorded for post incident analysis and used to assist with future accident prevention. Un-manned installations can be remotely monitored allowing suitable action to be taken before personnel access the area thereby minimising risk and increasing safety.

Features

- Performs two functions - flame detection and CCTV surveillance
- Stand alone and provides continuous colour video and fire outputs
- Fixed sensitivity setting that is undiminished by other radiant heat sources
- Immune to common sources of unwanted alarms

Benefits

- Saves both maintenance and installation costs
- Advanced optical verification ensure system is functioning as specified
- Easily interchangeable with older models
- Superior false alarm immunity



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*No-one ever regretted
buying quality...*

Stand Alone Imaging Based Flame Detector FDS301

TECHNICAL DETAILS

Operating Voltage

- 24VDC Nominal
- 18V to 32V Maximum
- 10W Typical Power Consumption

Flame Sensitivity

- 1 square foot n-heptane fire @ 44m
- Coverage: 90 degree cone of view

Response Time

- Less than 5 seconds

Output(s)

- Relay contacts alarm and fault
- Current 4-20 mA
- RS485 bidirectional serial communications link
- Live Colour Video PAL or NTSC
- Hart optional

Certification

- ATEX: II 2 G Ex d IIC T4 (FM07ATEX0033)
- Factory mutual: 3260 (3029978)
- IEC 61508 : SIL 2 (MP 080203 C001)
- IECEx FME 07.0002
- Class 1 DIV 1 GROUPS B,C,D,T4
- Class 1 Zone 1 AEx/Ex d IIC T4

Ingress Protection

- IP66

Temperature

- Operating: -60C to +85C
- Storage: -60C to +85C
- Humidity: 0 to 100% RH

EMC Directive

- CE Certified

Enclosure

- 100 Dia x 200L Overall (mm)

Shipping Weight

- 2.2KG / 6KG*

Material

- LM25 (red epoxy coating) / 316 stainless steel option*

Cable Entries

There is an option of x1 or x2 of the following:

- Conduit Entry: 25mm or 20mm or ¾ NPT or ½ NPT
- Terminals: 2.5 mm²

Power On Delay

- Less than 2 seconds

Accessories

- Mounting & alignment bracket
- Flame detector test torch

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