



FIRE & GAS DETECTION TECHNOLOGIES INC.

# Meet the FlameSpec **FAMILY**



A complete range of high performance  
Triple IR (IR3) and UV-IR flame detectors with  
optional integrated High Definition Camera

[www.fg-detection.com](http://www.fg-detection.com)



# FlameSpec Flame Detectors with integrated High Definition video

An integrated High-Definition (HD) Camera allows clear imaging of fire and people at 100 ft. (30m). All fire events are recorded and stored in the detector for local or remote download and analysis. Continuous HD video can also be streamed live to a control room and recorded on a Network Video Recorder (NVR).



## FlameSpec IR3-HD

Model FLS-IR3-HD

Triple IR (IR3) Flame Detector with HD video detects hydrocarbon fuel and gas fires at long distances and provides the highest immunity to false alarms with its triple spectrum design.

The unmatched detection times and distances are:

- 40ms for fast fire burst or explosion
- 1.5s for 1 ft<sup>2</sup> (0.1m<sup>2</sup>) pan fire at 0-100 ft. (0-30m)
- 4s for 1 ft<sup>2</sup> (0.1m<sup>2</sup>) pan fire at 100-230 ft. (30-70m)



## Model FLS-IR3

Same as above but without HD camera capabilities



## FlameSpec UV-IR-HD

Models FLS-UV-IR-HD / FLS-UV-IR-F-HD

A UV and IR detector, comprising an IR sensor that operates at a wavelength of 2.7  $\mu\text{m}$  and a solar blind UV sensor, the FLS-UV-IR-HD detects hydrocarbon-based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires. The UV sensor has a special logic circuit that prevents false alarms from solar radiation.

- 5ms for fast burst of explosion
- 1.5s for 1 ft<sup>2</sup> (0.1m<sup>2</sup>) pan fire at 0–50 ft. (0–15m)
- Up to 3s for 1 ft<sup>2</sup> (0.1m<sup>2</sup>) pan fire at 50–100 ft. (15–30m)

Model FLS-UV-IR-F-HD does not see hydroxyl and hydrogen fires and utilizes an IR sensor that operates at a wavelength of 4.0–5.0  $\mu\text{m}$

## FlameSpec IR3-H2-HD

Model FLS-IR3-H2-HD

Detects ‘invisible’ hydrogen (H<sub>2</sub>) gas fires at long distances and provides the highest immunity to false alarms with its triple spectrum design. A special filter in front of the HD camera allows you to see the ‘invisible’ fire.

The IR3-H2-HD is fast, responding in:

- 40ms for fast fire burst or explosion
- 1.5s for 32" (0.8m) hydrogen fire at 0–66 ft. (0–20m)
- 4s for 32" (0.8m) hydrogen fire at 66–100 ft. (20–30m)



Models FLS-UV-IR / FLS-UV-IR-F

Same as above but without HD camera capabilities



Model FLS-IR3-H2

Same as above but without HD camera capabilities

# About Us

We are committed to respond to the market requirements for improved performance and more reliable flame detection products.

That includes:

- Fastest speed of response
- Highest immunity to false alarms
- Operation in all weather conditions
- Reduced cost of ownership
- Expert technical & application support

\*Not FLS-IR3-H2 or FLS-IR3-H2-HD  
\*\*Units available upon request

# Approvals

## Explosion proof

ATEX: II 2 G D

Ex db IIC T5 Gb or Ex db eb IIC T5 Gb and  
Ex tb IIIC T95°C Db -55°C<Ta<75°C

Ex db IIC T4 Gb or Ex db eb IIC T4 Gb and  
Ex tb IIIC T105°C Db -55°C<Ta<85°C

FMus & FMc

Class I, Div. 1, Groups B, C & D; T4

Class I, Zone 1, AEx/Ex db IIC T4 Gb

T4 -50°C≤Ta≤85°C

T5 -50°C≤Ta≤75°C

EAC CU TR

1Ex d IIC T5 Gb or 1Ex de IIC T5 Gb and  
Ex tb IIIC T95°C Db -55°C≤Ta≤75°C

1Ex d IIC T4 Gb or 1Ex de IIC T4 Gb and  
Ex tb IIIC T105°C Db -55°C≤Ta≤85°C

Other certifications available including IECEx, Inmetro and PESO. Contact FGD Inc. for further details.

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## Performance

ANSI FM 3260

EN 54-10\*

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## Functional safety

Complies to SIL2, per IEC 61508\*\*

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## MED

DNVGL Certificate Number MED-B-00006AM\*\*

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