



## Description

The MultiFlame DF-TV7-V is a combined ultraviolet/infrared flame detector offering excellent flame detection while maintaining outstanding false alarm immunity.

The MultiFlame DF-TV7-V is designed to respond to unwanted hydrocarbon fires, while maintaining a high degree of false alarm immunity.

The device offers a wide range of output options, as standard and is suitable for use in SIL 2 applications. The unit may be interfaced directly with a wide range of fire panels, controllers and PLC's etc.

The unit is fully configurable using a wireless handheld terminal (TLU) or optionally via HART® giving true flexibility to the installer. Time delays, sensitivity and output configuration are all set up via the TLU; a hazardous area approved handheld unit.

Wireless testing of the optical and output circuits is also possible using the TLU.



Wide Field of View  
Excellent False Alarm Immunity  
Continuous Auto-check of Optical Lens  
Certified SIL 2 by an External Body



TLU Wireless (IR)  
Handheld Terminal



## Applications

- ▶ Refineries
- ▶ Drilling and Production Platforms
- ▶ Fuel Loading Facilities
- ▶ Compressor Stations
- ▶ LNG/LPG Processing and Storage
- ▶ Gas Turbines
- ▶ Chemical Plants

## Features

- ▶ Combined UV and multi IR technologies
- ▶ Wide field of view
- ▶ Relays and 4-20mA output
- ▶ Continuous auto-check of optical lens
- ▶ Selectable sensitivity and time delays
- ▶ Wireless detector configuration and testing using TLU
- ▶ HART® output option available

## Benefits

- Excellent false alarm immunity
- Fewer detectors needed due to enhanced fire detection coverage
- Standard industry interfaces
- Ensures safe and proper device operation
- For configuration to each application
- Minimizes the need for direct detector access
- Full configuration and diagnostics over non-proprietary interface

# MultiFlame DF-TV7-V ■ Multi-spectrum UV/2IR Flame Detection

R06/2013

## Technical Data

### General

**Technology:** Multi-spectrum Ultra Violet Dual Infrared

**Fire Types:** Hydrocarbon fires

**Range, n-heptane:** 45m (147ft) 0.3x0.3m (1sq ft)

**Range, gasoline:** 35m (114ft) 0.3x0.3m (1sq ft)

### Output Signal

**Standard:** 4-20 mA, max load impedance 700 Ohm (Std.)

**Option HART®:** HART Protocol (7th edition)

**PLC option:** 0-22mA (User configurable)

**Syntel:** Lonworks

**Alarms:** 2 x configurable Relays max 1A / 30V

**Visual:** Normal Operating, Alarm, Fault

### Electrical

**Power Supply:** 24V DC, range (18-28V DC)

**Power Consumption:** 2W normal; 4W during test

**Connection:** 0.14 mm<sup>2</sup> (28 AWG) - 1.5mm<sup>2</sup> (16 AWG)  
Shielded cable recommended.

### Environmental

**Storage:** -40°C to +70°C (-40°F to +158°F)

**Operating:** -40°C to +65°C (-40°F to +149°F)

**Option:** Sunshade, max. temp. 85°C (185°F)

**Humidity:** 99% RH (non-condensing)

**Ingress:** IP66

**RFI/EMI:** Complies with EN5013-4

### Explosion Proof Housing

**Material:** 316 L stainless steel

**Weight:** 5kg (10 lbs)

### Approvals

**ATEX:** II 2 G Ex d II C T6 Gb (-40°C to +65°C)  
Certificate #: LCIE 13 ATEX 3025 X

**IECEX:** IECEX LCIE 13.0022X

**CE DPC:** \*\*\*\*-CPD-\*\*\*\*\* EN 54-10 Standard (pending)

**SIL:** SIL2 Approval without redundancy

### Accessories

**TLU600:** Infrared remote control unit

**LT15:** Test lamp

**AS045:** Air shield

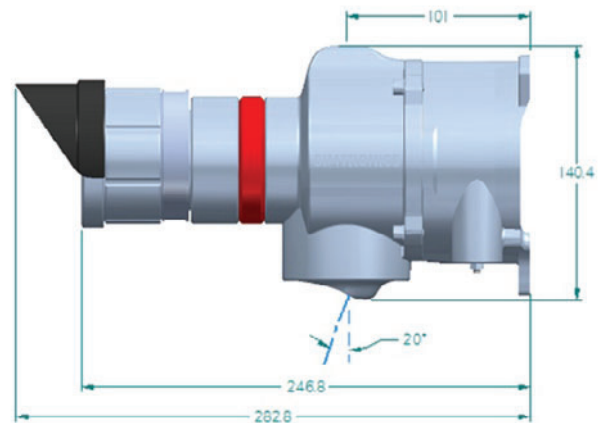
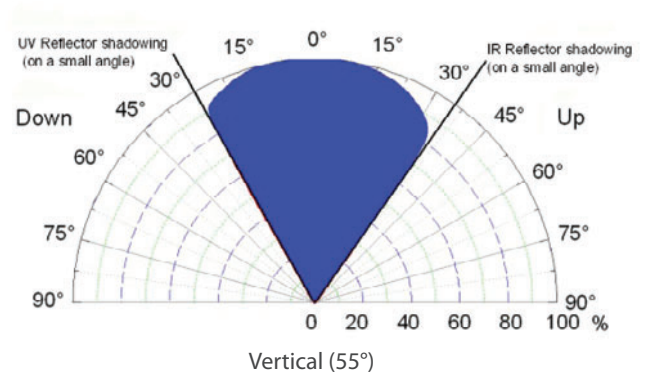
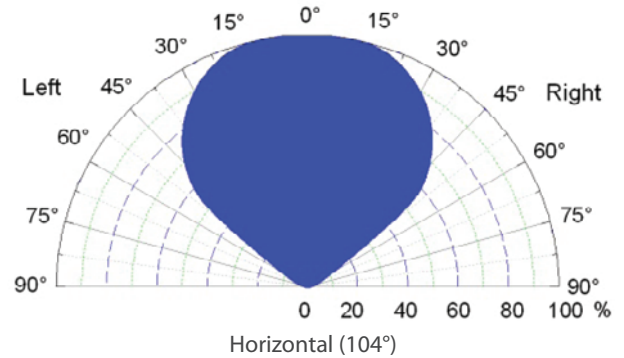
**AS046:** Mounting bracket

**AS215:** Tag plate

**AS040/AS041:** Long type visor (vertical angle restriction,  
vertical and horizontal angle restriction)

**AS008-400:** Sun shade

**AS056-450:** Weather protection



### Other Products (Stainless Steel Range)

**DGI-TT7:** MultiTox, Toxic (EC Cell) Gas Detector

**DG-TT7:** MultiTox, Solid-State (MOS) Gas Detector

**DG-TX7:** MultiXplo, Flammable Gas Detector

Specifications subject to change without notice



Tel: 713-559-9200  
Toll Free: 888-367-4286  
Fax: 281-292-2860  
Email: sales@detcon.com  
Web: www.detcon.com

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Certified