



Description

The MultiFlame DF-TV7-T is a multi-spectrum infrared flame detector using three wavelengths. DF-TV7-T responds to hydrocarbon fires and is the right choice for operation in dirty environments or for detection of smoky fires.

The MultiFlame DF-TV7-T 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 3 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 (R) 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.



Long Range
Wide Field of View
Continuous Auto-check of Optical Lens
Certified SIL 3 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
- ▶ Aircraft Hangars

Features

- ▶ Multi-spectrum infrared flame using three wavelengths
- ▶ Long range (up to 80m, 260 feet) and 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

- Selectable sensitivity and time delays
- Fewer detectors needed due to enhanced fire detection coverage
- Standard industry interfaces
- Ensures proper device operation
- For configuration to each application
- Minimizes the need for direct detector access
- Full configuration and diagnostics over non-proprietary interface

Technical Data

General

Technology: Multi-spectrum Infrared

Fire Types: Hydrocarbon fires

Range, n-heptane: 80m (260ft) 0.3x0.3m (1sq ft) (long range version)

Range, gasoline: 65m (210ft) 0.3x0.3m (1sq ft) (long range version)

Output Signal

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

Option HART (R): HART Protocol (7th edition) (pending)

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: 0.3 mm² (22 AWG) - 1.5mm² (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: 95% 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 Number: LCIE 13 ATEX 3025 X

IECEX: IECEx LCIE 13.0022X

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

SIL: SIL 3 approval without redundancy IEC 61508-1 to 7
Certified LCIE SF-*-T-20131103R0

Accessories

TLU600: Infrared remote control unit

LT15: Test lamp

AS045: Air shield

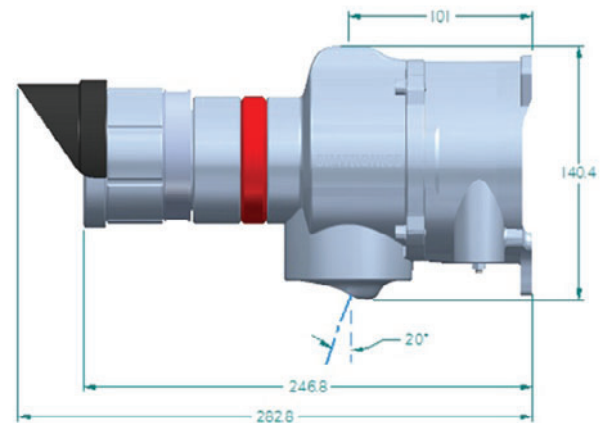
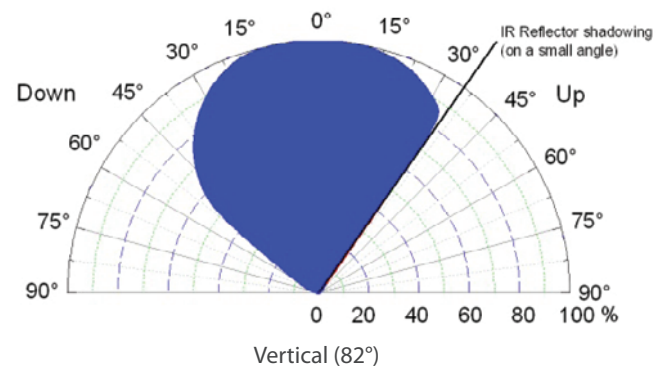
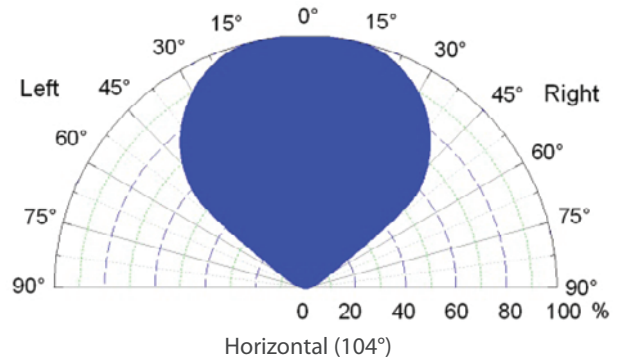
AS048: Wall-mount fixing ball-pivot bracket

AS215: Tag plate

AS040: Long type visor (vertical upper angle reduction)

AS041: Long type visor (horizontal and vertical upper angle reduction)

AS008-400: Sun shade



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