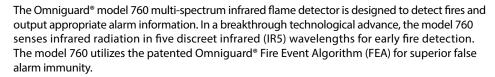


MULTI-SPECTRUM INFRARED IR5 FLAME DETECTOR

Omniguard[®] model 760



The multi-spectrum sensor information, combined with the sophisticated algorithm, enables the model 760 the ability to quickly detect hydrocarbon and certain non-hydrocarbon fueled fires. The model 760 also features an automatic self-test function to monitor the detector's ability to sense fires and report a fault condition when impaired. Typical applications for the Omniguard® 760 model are refineries, pipelines, production platforms, power plants, compressor stations, LNG facilities, LPG facilities, tank farms, hangars, and petrochemical plants.

Specifications

Performance ratings

Responsive to hydrocarbon and non-hydrocarbon flames.

Third-party performance certified to detect: Normal sensitivity

- 1 square foot gasoline fire at 75 feet in <1 second
- 1 square foot n-Heptane fire at 75 feet in <1 second Enhanced sensitivity
- 1 square foot gasoline fire at 100 feet in <1 second
- 1 square foot n-Heptane fire at 100 feet in <1 second Long distance sensitivity
- 1 square foot gasoline fire at 200 feet in <1 second
- 1 square foot n-Heptane fire at 200 feet in <1 second
- 4 square foot JP-5 fire at 200 feet in <5 seconds

Environmental ratings

Rated:

Class I, Division 1, Groups B, C, D (explosion proof)
Class II, Division 1, Groups E, F, G (dust ignition proof)
Type 4X weatherproof, dust-tight, watertight
CE0081 I 2 G/D
Ex db IIB+H₂ T5 Gb for gas
Ex tb IIIC T100°C Db IP66 for dust

Housings

Copper-free aluminum conversion coated to MIL-C-5541C, Class 3 (white) Stainless Steel 316 housing with passive finish per MIL-S-5002C, Type 1

Operating temperature

-40C° to +85°C (-40F° to +185°F)

Operating humidity

0-95% RH (non-condensing) (withstands up to 100% RH for short periods)

Specifications continue on next page...



Key features

- Patented Fire Event Analysis (FEA) algorithm for superior false-alarm immunity
- b Five-year warranty on sensors from date of delivery, three-year warranty on components or manufacturing defects from date of delivery
- 5 Field of view 90°
- 6 Robust, weatherproof enclosure for indoor or outdoor applications
- FM, CSA, IECEx, ATEX, SIL2, UKCA, PESO, Russian Fire Certificate, EMC, LVD, CSFM
- Advanced through-the-lens diagnostic self-test
- **6** Long range detection
- 6 Self-contained, explosion-proof enclosure
- 6 Field configurable relays and sensitivity
- 6 State-of-the-art microprocessor control
- High intensity, localized indication of fire or fault



Omniguard[®] model 760

Specifications (continued)

Spectral response

Infrared peak sensitivities of

2.2 μm, 2.9 μm, 3.7 μm, 4.4 μm, 5.8 μm

Detector inputs

Inputs

 nominal voltage 24 VDC (ripple voltage <240 mV)

• range 20 to 30 VDC

Power consumption

80 mA standby 100 mA alarm · auto and manual test 160 mA

Detector outputs

Relav

• relays (2) fire, trouble, dry contacts, hermetically sealed • fire relay user selectable latching or non-latching 2 A at 30 VDC, User selectable NO or NC rated

Current loop: 0 to 20 mA output

• 20 mA = Fire

• 16 mA = Fire IR warning

• 15 mA = Ref IR warning

• 4 mA = Normal

• 3 mA = Fire relay coil fault

• 2.5 mA = Block fault

• 1.5 mA = Exceedance fault

• 1 mA = Self-test fault

• 0 mA = Current loop fault

RS485 MODBUS RTU

Mechanical considerations

2,4 kg (5 lbs) (aluminum) Weight

6.3 kg (13 lbs) (stainless steel)

114 x 140 x 125 mm Height x width x depth

(4.5 x 5.5 x 4.9 in)

Conduit entry 3/4-14 NPT or M20-1.5

Optional accessories Art.no

Swivel mount (SS304) 20856 (for aluminum detectors) Pole mount 2" (SS316L) 26803 (for swivel mount 20856)

Swivel mount (SS316) 24784 (for stainless steel detectors) Pole mount 2" (SS316L) 26807 (for swivel mount 24784)

Rain shield/Sun shield

(SS316L)

27976

Air shield assembly 19797

Portable test unit 545

Ordering information

To order, please specify

Type Omniguard® model 760

Multi-spectrum infrared flame detector Designation

Ordering number 760 - X X X X X

Fire type

0 Hydrocarbon/non-hydrocarbon

Housing material/conduit entry

0 Aluminum, 3/4-14 NPT (white)

2 Stainless steel, 3/4-14 NPT 3 Aluminum, M20-1.5 (white)

5 Stainless steel, M20-1.5

Test feature

1 Auto self-test

Fire relay configuration

0 Latching

1 Non-latching

Approvals

0 FM, CSA, IECEx, ATEX, SIL2,

UKCA, PESO, Russian Fire Certificate, EMC, LVD, CSFM

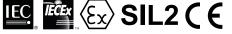












For information on the specific certifications and approvals each Omniguard® Flame Detector holds please visit: www.omniguardbyfirefly.com/flamedetectors



