



SafEye

Open-Path Gas Detection

Selection Guide

05/23/2005

Note:

The maximum operating distances listed below are for ideal indoor conditions. Each model's optimum operating distance is calculated as (maximum distance + minimum distance) divided by 2.

Generally the maximum distance is achieved under 'ideal' weather conditions – so under anything but 'ideal' conditions, our recommendation would be to limit the maximum distance to 80% of stated.

Flammable Gas Detection

700 Series Flash Type IR Systems

with Heated Optics in EExde(ia) Approved Stainless Steel Enclosure

- for Hydrocarbon Gases Detection

MODEL	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE
701	13 - 66 (4 - 20)	0-5 LEL.m 0-2 LEL.m	XDS-C-111XX	XSS-C-11X
702	50 - 230 (15 - 70)	0-5 LEL.m 0-2 LEL.m	XDS-C-112XX	XSS-C-11X
703	165 - 450 (50 - 140)	0-5 LEL.m 0-2 LEL.m	XDS-C-113XX	XSS-C-11X

- for Ethylene Gas Detection

MODEL	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE
721	13 - 66 (4 - 20)	0-5 LEL.m 0-2 LEL.m	XDS-C-121XX	XSS-C-11X
722	50 - 230 (15 - 70)	0-5 LEL.m 0-2 LEL.m	XDS-C-122XX	XSS-C-11X
723	165 - 450 (50 - 140)	0-5 LEL.m 0-2 LEL.m	XDS-C-123XX	XSS-C-11X

Flammable Gas Detection

200 Series Flash Type IR Systems in Epoxy-coated, Aluminum, EExd or EExde Approved Enclosure

for Hydrocarbon Gases Detection

MODEL	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE	ST.ST. OPTION
202	9.8 - 39.4 (3 - 12)	0-5 LEL.m 0-2 LEL.m	OPIFI00*	OPSF10*	YES
203	31 - 130 (10 - 40)	0-5 LEL.m 0-2 LEL.m	OPIFI00*	OPSF11*	YES
204	50 - 198 (15 - 60)	0-5 LEL.m 0-2 LEL.m	OPIFI00*	OPSF12*	YES
226	93 - 290 (30 - 90)	0-5 LEL.m 0-2 LEL.m	OPIFI00*	OPSF13*	YES
227	155 - 450 (50 -140)	0-5 LEL.m 0-2 LEL.m	OPIFI101*	OPSF13*	YES

for Ethylene Gas Detection

MODEL	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE	ST.ST. OPTION
252	9.8 - 39.4 (3 - 12)	0-5 LEL.m 0-2 LEL.m	OPIFI10*	OPSF10*	YES
253	31 - 130 (10 - 40)	0-5 LEL.m 0-2 LEL.m	OPIFI10*	OPSF11*	YES
254	50 - 198 (15 - 60)	0-5 LEL.m 0-2 LEL.m	OPIFI10*	OPSF12*	YES
256	93 - 290 (30 - 90)	0-5 LEL.m 0-2 LEL.m	OPIFI10*	OPSF13*	YES
257	155 - 450 (50 -140)	0-5 LEL.m 0-2 LEL.m	OPIFI111*	OPSF13*	YES

* **Options** 200 Series

- For duct mounting (model 202/252 only), add suffix 'D'
- For standard mount, add suffix 'S'
- For St. St. version, add suffix 'ST' after D or S

Flammable Gas Detection

300 Series Duct Mounted IR Systems in Epoxy-coated, Aluminum, EExd or EExde Approved Enclosure

for Hydrocarbon Gases Detection

MODEL	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE	DUCT MOUNT OPTION	ST.ST. OPTION
301	2 - 11.5 (0.6-3.5)	0-2.5 LEL.m 0-1 LEL.m	OPIL000*	OPSLI0*	YES	YES
302	9.9 - 49.5 (3-15)	0-5 LEL.m 0-2 LEL.m	OPIL100*	OPSLI0*	YES	YES

for Ethylene Detection

MODEL	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE	DUCT MOUNT OPTION	ST.ST. OPTION
351	2 - 11.5 (0.6-3.5)	0-2.5 LEL.m 0- 1 LEL.m	OPIL010*	OPSLI0*	YES	YES
352	9.9 - 49.5 (3-15)	0-5 LEL.m 0-2 LEL.m	OPIL110*	OPSLI0*	YES	YES

* **Options:** 300 Series

- For duct mounting, add suffix 'D'
- For standard mount, add suffix 'S'
- For St. St. version, add suffix 'ST' after D or S

Toxic Gas Detection

400 Series Flash Type UV Systems

in Epoxy-coated, Aluminum, EExd or EExde Approved Enclosure

- for Hydrogen Sulphide Detection

MODEL	GASES	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE	DUCT MOUNT OPTION	ST.ST. OPTION
410	H ₂ S	3.3 – 13 (1 – 4)	0-500 ppm.m 0-200 ppm.m	OPUF110*	OPSFU0*	YES	YES
411		6.6 – 26 (2 - 8)	0-500 ppm.m 0-200 ppm.m	OPUF111*	OPSFU0*	YES	YES
412		23 - 82.5 (7 - 25)	0-500 ppm.m 0-200 ppm.m	OPUF010*	OPSFU4*	YES	YES
413		49.5 – 165 (15 - 50)	0-500 ppm.m 0-200 ppm.m	OPUF110*	OPSFU4*	NO	YES
414		99 – 330 (30-100)	0-500 ppm.m 0-200 ppm.m	OPUF111*	OPSFU3*	NO	YES

- for Ammonia, Benzene, Xylene, Toluene, CS₂ Detection

MODEL	GASES	DISTANCE ft (m)	DETECTION RANGE	DETECTOR	SOURCE	DUCT MOUNT OPTION	ST.ST. OPTION
420	Ammonia Benzene Xylene Toluene CS ₂	3.3 – 13 (1 – 4)	0-500 ppm.m 0-200 ppm.m**	OPUF120*	OPSFU0*	YES	YES
421		6.6 – 26 (2 - 8)	0-500 ppm.m 0-200 ppm.m**	OPUF020*	OPSFU4*	YES	YES
422		23 - 82.5 (7 - 25)	0-500 ppm.m 0-200 ppm.m**	OPUF120*	OPSFU4*	YES	YES
423		49.5 – 165 (15 - 50)	0-500 ppm.m 0-200 ppm.m**	OPUF120*	OPSFU3*	NO	YES

*** Options 400 Series**

- For duct mounting, add suffix 'D'
- For standard mount, add suffix 'S'
- For St. St. version, add suffix 'ST' after D or S

**At the high sensitivity of 200ppm.m full scale, the system for Ammonia and Benzene/Xylene is influenced by background radiation fluctuations that may cause an inaccurate gas reading.