



# FlameSpec UV-IR



UV-IR

Model FLS-U V-IR

<b>U</b>	<b>Detection time and distance</b>	5ms for fast burst of explosion U HQ HV <sup>2</sup> (0.1m <sup>2</sup> PJGRVCPQCPQ CVb HVbO UHQ HV <sup>2</sup> (0.1m <sup>2</sup> PJGRVCPQCPQ CVb HVbO
	<b>Field of view (IR detection)</b>	90° Horizontal, 80° Vertical
	<b>Time Delay</b>	0-30 seconds
	<b>Built in Test</b>	Automatic and Manual
<b>ELECTRICAL SPECIFICATIONS</b>	<b>Operating Voltage</b>	24 VDC nominal (18-32 VDC)
	<b>Current Consumption</b>	Standby: 120mA 180mA all systems in operation (including window heater)
	<b>Electrical Entries</b>	<b>FDEOHDGEPFVWGPVTGUb02T</b>
	<b>Wiring</b>	12-20AWG (2.5-0.35mm <sup>2</sup> )
<b>OUTPUTS</b>	<b>Relays</b>	637olt-free contacts rated 2A at 30 VDC NCDBPQCNNBGPDRBDOOFORVHG (CWNBPQCNNBQF
	<b>0-20mA (stepped) current output</b>	<b>TG CPF TG UNCVGF EPIWTCVPU UPM CPFUWTEG</b> +57XQLWVDDLDEOHXSRQUHTXHVV
	<b>Indication</b>	<b>TENT UHHHOOR5HG</b>
	<b>Modbus</b>	<b>EORCVDNGP 5</b>
<b>MECHANICAL SPECIFICATIONS</b>	<b>Size</b>	<b>b 00</b>
	<b>Weight</b>	<b>GVGEVT 5VCPNGU8VGGN NDU MI</b> 6KNWPV 5VCKPNG8VGGN NDU MI
<b>ENVIRONMENTAL SPECIFICATIONS</b>	<b>Temperature Range</b>	Operating: -67°F to +1°F (-55°C to +5°C) Storage: -67°F to +185°F (-55°C to +85°C)
	<b>Humidity</b>	<b>R V PPEPFGPUPI</b>
	<b>Ingress Protection</b>	IP66 & 68 (2m, 24hr); NEMA 4X & 6P
<b>APPROVALS</b>	7(;	6:++)& Z FD++% )D D FDGD++% )D CPF Z VD++% )D % & D o% Co% Z FD++% )D D FDGD++% )D CPF Z VD++% )D % & D o% Co%
	☒	ED++% )D o% Co% ED++% )D o% Co%
	☒	MCU&KX)WR6 MCU&GZD++% )D 6o% Co% 6o% Co%
	<b>EAC CU TR</b>	Ex d IIC T5 Gb or Ex de IIC T5 Gb and Ex tb IIIC T95°C Db -55°C Ta 75°C Ex d IIC T4 Gb or Ex de IIC T4 Gb and Ex tb IIIC T105°C Db -55°C Ta 85°C
	<b>Performance</b>	ANSI FM 3260 EN 54-10
	<b>Functional VDIHW</b>	<b>RPSOLHVW8IL2</b> , per IEC 61508XQWVDDLDEOHXSRQUHTXHVV
	<b>ACCESSORIES</b>	6WDLQHVVVWH heater FRHU )ODPHVLPDWRUPRGHO))0 5 SRPDS ☒☒ dDSWHUWUHWURILWLVDWOODWLRV
<b>WARRANTY</b>	<b>5 years</b>	



FIRE & GAS DETECTION TECHNOLOGIES INC.

Fire and Gas Detection Technologies Inc. | IRIM UWTHEE

# FlameSpec UV-IR

## UV-IR Flame Detector

Model: FLS-UV-IR

### Immunity to False Alarm

False Alarm Source	Modulated		Unmodulated	
	Distance ft. (m)	Response	Distance ft. (m)	Response
Sunlight, Direct, Reflected		No Alarm		No Alarm
Incandescent frosted glass light, 300W	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Fluorescent, 70W (3x23.3W)	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Electric arc	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Arc welding	10.0 (3.0)	No Alarm	10.0 (3.0)	No Alarm
Radiation heater, 2000W	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Halogen lamp (500W) non-shielded	7.0 (2.0)	No Alarm	7.0 (2.0)	No Alarm
Halogen lamp (1000W)	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Mercury vapor lamp 160Wx3	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Exhausts	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Projector led	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Solenoid bell	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
soldering iron	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm
Electric Drill	2.0 (0.6)	No Alarm	2.0 (0.6)	No Alarm

# FlameSpec UV-IR

## UV-IR Flame Detector

Model: FLS-UV-IR

### Response Characteristics

Fuel	Size	Sensitivity	Distance ft. (m)	Avrg Resp.Time (s)
N-Heptane	1 x 1 ft.	Extreme	98 (30)	2.0
N-Heptane	1 x 1 ft.	High	75 (23)	1.7
N-Heptane	1 x 1 ft.	Medium	49 (15)	1.0
N-Heptane	1 x 1 ft.	Low	16 (5)	1.0
Gasoline	2 x 2 ft.	Extreme	197 (60)	3.3
Gasoline	1 x 1 ft.	Extreme	98 (30)	1.8
Gasoline	1 x 1 ft.	Medium	49 (15)	1.3
Methane	32-in Plume	Extreme	59 (18)	1.4
Methane	32-in Plume	Medium	30 (9)	0.9
LPG	32-in Plume	Extreme	75 (23)	1.2
LPG	32-in Plume	High	56 (17)	1.6
LPG	32-in Plume	Medium	33 (10)	1.2
LPG	32-in Plume	Low	13 (4)	1.2
Diesel	1 x 1 ft.	Extreme	75 (23)	2.6
Diesel	1 x 1 ft.	Medium	36 (11)	1.2
JP5	1 x 1 ft.	Extreme	75 (23)	3.3
JP5	1 x 1 ft.	High	56 (17)	1.8
JP5	1 x 1 ft.	Medium	36 (11)	1.2
JP5	1 x 1 ft.	Low	16 (5)	1.2
Kerosene	1 x 1 ft.	Extreme	75 (23)	1.8
Kerosene	1 x 1 ft.	Medium	36 (11)	0.9
Methanol	1 x 1 ft.	Extreme	52 (16)	0.8
Methanol	1 x 1 ft.	High	43 (13)	3.2
Methanol	1 x 1 ft.	Medium	30 (9)	1.3
Methanol	1 x 1 ft.	Low	10 (3)	2.7
Ethanol	1 x 1 ft.	Extreme	62 (19)	4.1
Ethanol	1 x 1 ft.	Medium	31 (9.5)	2.9
Isopropanol	1 x 1 ft.	Extreme	75 (23)	2.2
Isopropanol	1 x 1 ft.	Medium	36 (11)	0.8
Polypropylene	1 x 1 ft.	Extreme	49 (15)	1.4
Polypropylene	1 x 1 ft.	Medium	23 (7)	0.9
Paper	1 x 1 ft.	Extreme	33 (10)	1.2
Paper	1 x 1 ft.	Medium	23 (7)	1.0
H <sub>2</sub>	32-in Plume	Extreme	66 (20)	6.4
H <sub>2</sub>	32-in Plume	Medium	33 (10)	1.0