

UV/IR Flame Detector

GTF-1100U



Features

- Detect flame with UV and IR sensor.
- Preventing false alarm with sophisticated detection method.
- Maximum detection range is 30 meters with 100° vertical and horizontal field of view.
- Non-hydrocarbon flame detectability.
- Relay contact output functionality.
- Embedded self-diagnosis function.

Accessories



Cable gland



Mounting bracket



Weather proof cover

Detector Specification

Detection method	UV / IR			
Flame	Hydrocarbon		Hydrocarbon & Non-Hydrocarbon	
Detection distance	Fuel	Distance (m)	Fuel	Distance (m)
	n-Heptane*	30	n-Heptane*	30
			Hydrogen**	20
	.1m ² pan fire* 1.00m(H) x 0.18m(W) plume fire**		.1m ² pan fire* 1.00m(H) x 0.18m(W) plume fire**	
Field of view	Horizontal : 100° Vertical : 100°		Horizontal : 100° Vertical : 100°	
Typical response time	Fuel	Responses time (sec)	Fuel	Responses time (sec)
	n-Heptane*	5.1 (4.6 ~ 5.1)	n-Heptane*	5.1 (4.6 ~ 5.1)
			Hydrogen**	5.2 (4.24 ~ 5.2)
Indicator	Status LED (Bi-Color : Red & Green) / Alarm LED (Red)			
Output signal	0-20mA Analog current output Alarm relay 1, Trouble relay 1 (SPST 1A at 30VDC or 0.3A at 125VAC, resistive load) RS-485 Interface (MODBUS RTU)			
Power consumption	Stand by (without B.I.T.) 2.2W @32VDC / 1.8W @24VDC / 1.5W @18VDC Stand by (with B.I.T.) 3.4W @32VDC / 2.9W @24VDC / 2.4W @18VDC Alarm 2.3W @32VDC / 1.9W @24VDC / 1.6W @18VDC			
Housing material	Aluminum alloy or Stainless steel			
Ambient temperature	KCs : T6 = -50°C ≤ Ta ≤ 60°C, T5 = -50°C ≤ Ta ≤ 75°C, T4 = -50°C ≤ Ta ≤ 85°C FM : T6 = -40°C ≤ Ta ≤ 60°C, T5 = -40°C ≤ Ta ≤ 75°C			
Storage temperature	-50°C ~ 80°C			
Operation temperature	-40°C ~ 75°C			
Operation humidity	Up to 95% RH (Non-condensing)			
Dimension	76(W) x 76(H) x 96.5(D) mm			
Weight (Detector only)	Aluminum alloy : Approx. 0.7kg / Stainless steel : Approx. 1.7kg			

Detector Certification

Explosion Proof Certification	KCs	Korean Explosion Proof Certification	Ex d IIC T6, T5, T4
	FM (Performance)	U.S. Explosion Proof and Performance Certification	FM 3260
	FM (Explosion proof)	U.S. Explosion Proof and Performance Certification	Class I, Division 1, Groups A,B,C,D, IP66/67 Class II/III, Division 1, Group E,F,G, IP66/67
	IECEX	International Explosion Proof Certification	Ex db IIC T6...T4 Gb / Ex tb IIIC T80°C Db
	NEPSI	Chinese Explosion Proof Certification	Ex db IIC T6...T4 Gb / Ex tb IIIC T80°C Db
	PESO	Indian Explosion Proof Certification	Ex db IIC T6...T4 Gb
	TRCU Ex	Russian Explosion Proof Certification	1Ex d IIC T6...T4 Gb X
	TS	Taiwanese Explosion Proof Certification	Ex db IIC T6...T4 Gb / Ex tb IIIC T80°C Db
	ATEX	European Explosion Proof Certification	II 2G GD Ex db IIC T6...T4 Gb / Ex tb IIIC T80°C Db
Other Certifications	CE(EMC)	European Electromagnetic Compatibility Certification	-
	KFI	Korean Fire Certification	
	CE(RoHS2)	European Restriction of Hazardous Substances Certification	
	KC	Korean Electromagnetic Compatibility Certification	
	TRCU Fire	Russian Fire Certification	
	-	Thailand Ministry of Energy Certification	