

InTense Flame Sensors



VFS-2000

Fireye's industry leading flame sensing technology now extends to the extreme conditions of gas turbine applications.

Designed to be a direct replacement for obsolete, legacy, and current flame detection sensors.

Fireye's new sensor is the latest in turbine flame detection technology. Purpose built to withstand the most InTense environments, it is ready to use out of the box. No tuning or setup is required.



Features

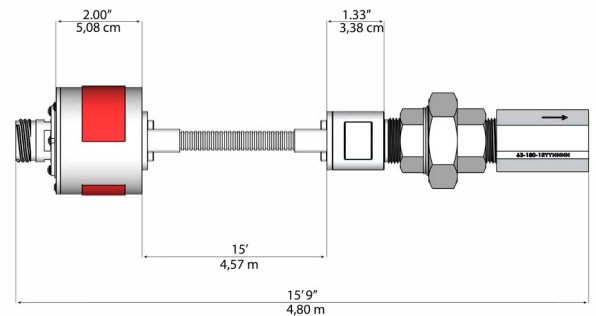
- H2-Ready
 - Capable of detecting flame in high or 100% hydrogen fuel blends
- Fast Installation
 - Mounts to turbine using 3/4" female NPT standard pipe
 - No HART setup required
 - No tuning necessary
 - No separate electronics housing required
 - No software modifications necessary for 4-20mA signal
- High Pressure and Temperature Rated
 - Can withstand compression ratio of the majority of gas turbines on the market
- Sapphire Window at the Combustor
 - High temperature fiber optics for precise flame signal transmission
- In Stock and Ready to Ship
- Solid State Design, no Tubes or Shutters
 - Ultraviolet (UV) sensitivity
- Fast Response Time



SIL3

InTense Kits

- VFS-2000-K15 - Kit with 15ft / 4.6m fiber optic length
VFS-2000-K30 - Kit with 30ft / 9.1m fiber optic length



Compatibility

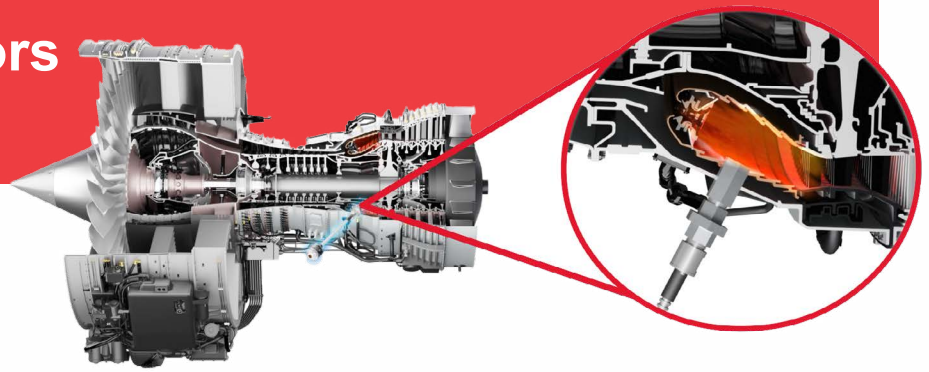
- Can be utilized across various gas turbine OEMs using optical flame detection, including:
 - Baker Hughes
 - Mitsubishi Heavy Industries
 - Westinghouse
 - GE Vernova
 - Siemens

Applications

- Down-Fired Reformers
- Gas Turbines
- Industrial Ovens
- Furnaces & Kilns
- Incinerators
- Molten Metal Processing

Curious if InTense is suitable for your application?
Contact us with all your questions on how we can support your project.

InTense Flame Sensors



Specifications

DESCRIPTION	VFS-2000
Hazardous Area Classification	Class I, Div 2 - (North America) Groups A,B,C & D, II 3 G Ex ec IIC T3C (CE)
Housing Material	Stainless Steel 18-8 (304)
Mounting Connection	3/4 male NPT
Min. Operating Temperature	32°F/0°C
Max. Operating Temperature Hot End	618°F/325°C
Max. Operating Temperature Cool End	284°F/140°C
Humidity	100%
Vibration	Per IEC 60069-2-64, Spectrum A.2. Category 3 FCC Part 15, Subpart B, Class A (30MHZ to 1GHz)
Detection Principe	Ultra-Violet SOLID STATE SENSOR
Sensor	Silicon Carbide Diode
Sensitivity	>4mA@1nW/cm²@310nm
Spectral Range	200nm-400nm
Output	4-20mA DC, current loop
Flame Presence Detection Time	175mS (typical < 75mS)
Flame Failure Detection Time	175mS (typical < 75mS)
Power Supply	18-30Vdc
High Pressure Window, differential Pressure	27ATM / 400PSI / 27.5 bar
High Pressure Window, differential Temperature	849°F/454°C
Reverse Polarity Protected	YES
Electrical Connection	5-pin male MIL-DTL-38999 shell, size 15 series III hermetic, scoop proof
SIL Rating	SIL 3
SIL Certificate	EN61508
UL Certificate	UL 353, 5th Ed., Issue Date: 1994-09-23, Revision Date: 2011-11-08
CSA Certificate	C22.2 NO. 24-15, 9th Ed. Issue Date: 2015-01-01
CE Certificate	EUROPEAN COMMUNITY COUNCIL DIRECTIVE 2014/30/EU

For more information, please [contact](#) your local Fireye Distributor.

fireye.com

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