



# Flame Tracker

## 500 million hours of fired operation

Reuter-Stokes' Flame Tracker UV sensor monitors the presence of a flame using ultraviolet light in temperatures up to 150°C (302°F), or 235°C (455°F) with water cooling.

Our flame sensors boast high sensitivity for a wide range of fuels including multiple hydrocarbons and hydrogen.

### High sensitivity, fast response

The Flame Tracker has an analog output with a very wide dynamic range and rapid response time. The sensor signals the flame status to the control system in less than 25 milliseconds (0.025 seconds). This means interruption-free service and improved availability.

#### Reduced maintenance

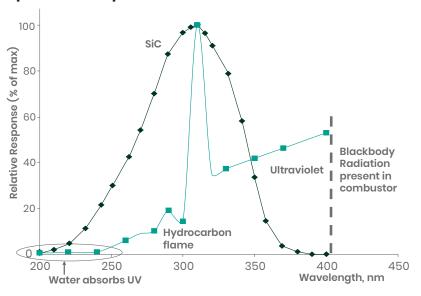
The Flame Tracker is equipped with quick disconnect connectors, allowing sensor replacement time to be reduced from hours to minutes. Its improved sensor-cooling feature lowers the impact of surrounding heat and extends the life of electronics.

Operating parameters	
Power requirements	24 VDC nominal, 12-30 VDC @ 100 mA
Output	4-20 mA (a module to convert output to other controller inputs is available)
Response time	< 0.025 seconds
Temperature range	-40°C to +150°C (-40°F to +300°F), 235°C (455°F) with specified water or air cooling
Process pressure	To 400 psig (2.8 MPa)
Sensitivity (Standard) Sensitivity (ILG)	5 mA @ 1x10 <sup>10</sup> photons/in <sup>2</sup> /sec. @ 310 nm 6.5 mA @ 1x10 <sup>10</sup> photons/in <sup>2</sup> /sec. @ 310 nm

Material specifications	
Housing material	300 series stainless steel
Mechanical interface	3/4" NPT female
Electrical connector	MIL-C-38999 series III size 15 (5pin)
Sensor	Silicon Carbide (SiC) photodiode

Part numbers	
RS-FS-9001	NA Class 1 Division 2, ATEX Zone 2
RS-FS-9004	NA Class 1 Division 1, ATEX Zone 1
RS-FS-9006	For aeroderivative gas turbines; NA Class 1 Division 2, ATEX Zone 2
RS-FS-9001-25X	NA Class 1 Division 2, ATEX Zone 2

# **Spectral response**



# What is ILG?

Now available for both the Flame Tracker and Flame Tracker Dry 325, Increased Low Gain (ILG) technology provides "flame on" signal at a lower light threshold.

This allows for extra sensitivity to low intensity light, detecting dim flames caused by obstructions, condensation, or deposits on the sensor window.

Increased sensitivity results in improved function in applications with obscured sight tubes, fouled lenses, and other conditions that would reduce the amount of light reaching the sensor.

#### Flame emission

#### — sic

Peak sensitivity closely matches the key flame peak at 310 nm.



# **Contact us**

Reuter-Stokes is dedicated to providing high quality, high reliability equipment to our customers.

Contact us today to talk to an expert about your flame sensing needs.

