



Increased Low Gain (ILG) model also available

- Increased Low Gain (ILG) technology provides the “flame on” signal at a lower flame light threshold.
- This allows for increased sensitivity to low intensity flame light, enabling the detection of dim flames in both the primary and secondary combustion systems that can be caused by obstructions, condensation or deposits on the sensor window.
- Increased sensitivity results in improved function in gas turbine primary and secondary systems, particularly in the presence of obscured sight tubes, fouled lenses, and other conditions that reduce the amount of light reaching the sensor for measuring flame on or flame off.

Flame Tracker

Aeroderivative approved:

Designed to meet the requirements of the aeroderivative OEM for use on gas turbines; Built under the AS9100 aviation quality system

> 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.

Sensor cooling options

Reuter-Stokes offers both an air cooling can for compressed air and a water cooling coil.



Operating parameters

Power requirements	24 VDC nominal, 12–30 VDC @ 100 mA
Output	4–20 mA (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)	• 5 mA @ 1x10 ¹⁰ photons/in ² /sec. @ 310 nm
Sensitivity (ILG)	• 6.5 mA @ 1x10 ¹⁰ photons/in ² /sec. @ 310 nm

Reuter-Stokes Flame Sensors & Accessories for Aero-derivative Applications	
Description	RS Part Number
Flame Tracker, Aero-derivative – Aerospace OEM	RS-FS-9006
Flame Tracker, Aero-derivative – End Users	RS-FS-9006-MFR
Air Cooling Can, Aerospace OEM	RS-E2-0259
Air Cooling Can, End Users	RS-E2-0259-MFR
Interconnect Cables	RS-E2-0285PXXX

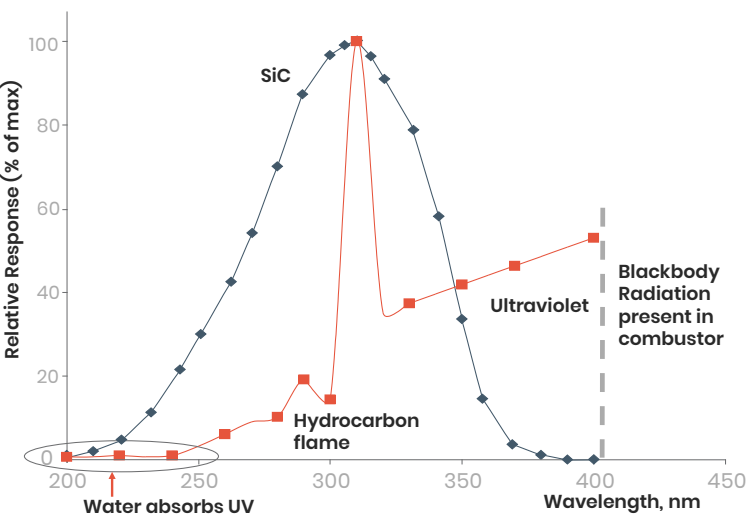
Housing material:
300 series stainless steel

Mechanical interface:
3/4" NPT female

Electrical connector:
MIL-C-38999 series III size 15 (5pin)

Sensor:
Silicon Carbide (SiC) photodiode

Spectral response



— Flame emission

— SiC

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

