Reuter-Stokes
a Baker Hughes business

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 dramatically improves gas turbine performance while significantly reducing maintenance requirements. Available for a variety of gas turbines, the Flame Tracker's optical photodiode is designed for use with multiple fuels and combustion systems, 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 @ $1x10^{10}$ photons/in^2/sec. @ 310 nm 6.5 mA @ $1x10^{10}$ photons/in^2/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

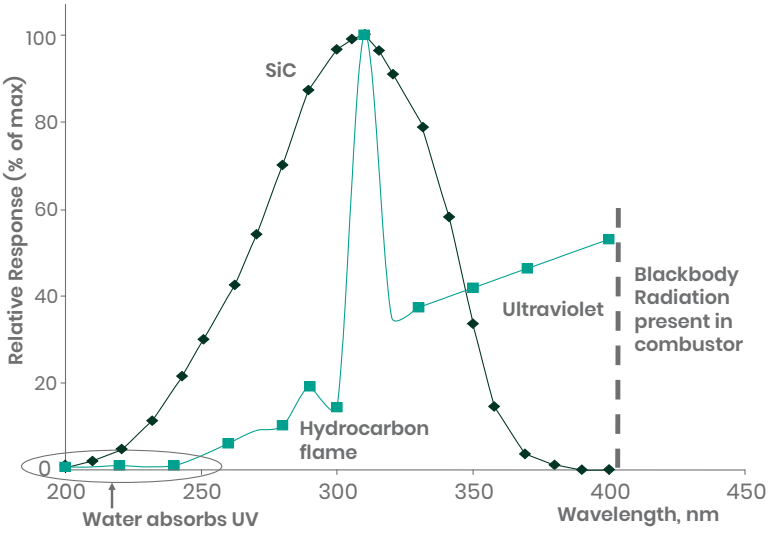
Reuter-Stokes Flame Sensors & Accessories for Aeroderivative Applications

Description	RS Part Number
Flame Tracker, Aeroderivative - Aerospace OEM	RS-FS-9006
Flame Tracker, Aeroderivative - 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

Sensor cooling options

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

Spectral response



— **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.

Baker Hughes

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