Reuter-Stokes
a Baker Hughes business

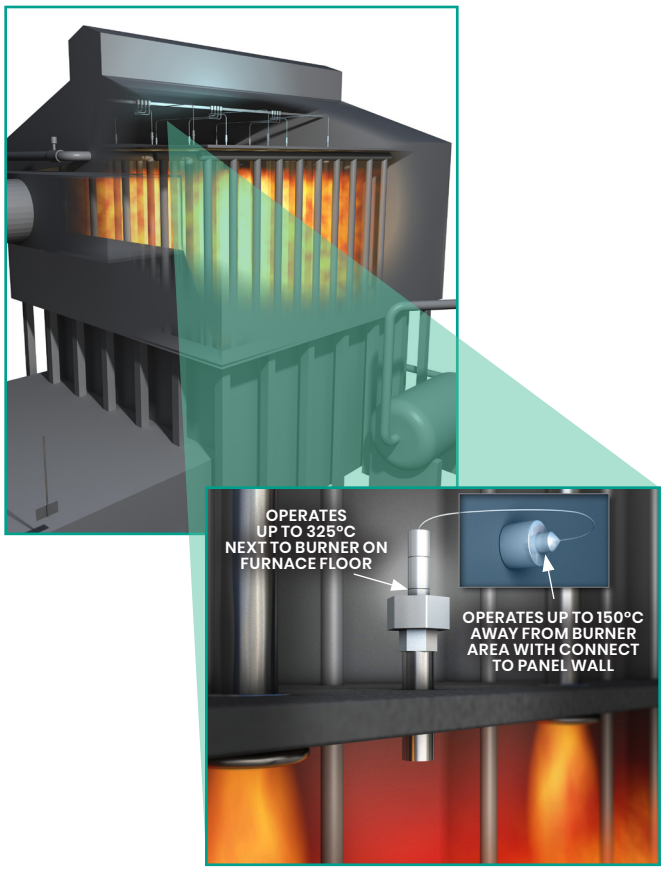
Flame Tracker Dry 325

Trusted to manage flames in some of the harshest environments for nearly a quarter of a century

Improved safety in harsh environments

Hot end operates up to 325°C

Know with confidence that burners are lit. Our Reuter-Stokes Flame Tracker Dry 325 senses the ultraviolet (UV) light produced by a flame and signals whether a flame condition exists. This rugged design provides continuous flame supervision in the harshest environments. 4-20 mA current loop output is compatible with multiple control systems and has noise immunity in industrial environments.



High sensitivity, fast response

- **Proven SiC technology** has high sensitivity to longer UV wavelengths and is not susceptible to black body radiation
- **Rapid response** time of less than 175 milliseconds. Similar products may take as long as 1.5 seconds to respond, which creates a potentially undesirable situation
- Built with the **same proven sensing technology** that has worked in the Flame Tracker for nearly a quarter of a century
- **Analog output** with a wide dynamic range
- Patented circuitry

Reduced maintenance

- **Mineral insulated cable** eliminates the need for electrical conduit and the use of fragile fiber optic cable
- **Ready to install,** no programming necessary

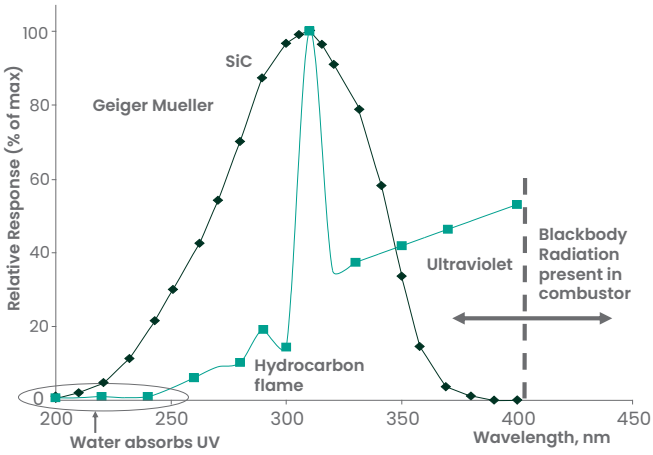
Safety and reliability

- **Safety.** Hazardous area certifications including North America, ATEX, IECEx, and multiple country specific certifications
- **High reliability.** Ruggedized construction, high temperature materials, SIL 2 rated
- **Industry standard** output signal (4-20 mA)
- **Fuel flexibility** operates reliably with many fuels
- **Ruggedized** mineral insulated cable

Specifications

Sensor Responsivity and Hydrocarbon Flame Emission Spectrum

Spectral response

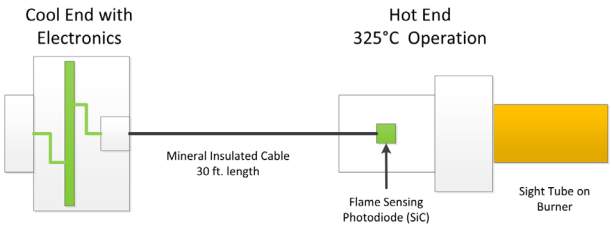


— **Flame emission**

— **SiC**

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

System configuration



Operating

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	< 175 milliseconds
Operating temperature range	Cool end: 40°C to 150°C(1) (104°F t0 302°F) Hot end: 40°C to 325°C (104°F to 617°F)
Survivability temperature range	Cool end: -51°C to 150°C (-60°F to 302°F) Hot End: -51°C to 325°C (-60°F to 617°F)
Process pressure	To 400 psig (2.8 MPa)
Sensitivity	5 mA @ $1x10^{10}$ photons/in^2/sec. @ 310 nm

(1) Thermal shutdown of the cool end occurs at 150±10°C

Material

Body mount	AISI 316 stainless steel
Housing	AISI 304 stainless steel
Mechanical interface	3/4" NPT female
Sensing element	Silicon Carbide (SiC) photodiode