



Comparing ethylene oxide (EtO) monitoring solutions

The Thermo Scientific™ MAX-iR™ OE-FTIR Gas Analyzers, combined with Montrose Sensible Environmental Data Platform (EDP), create the only total solution that fully meets customer needs and helps them to comply with ease to the proposed ethylene oxide NESHAP* and PID**.

Optically-enhanced Fourier transform infrared (OE-FTIR) spectroscopy vs. cavity ring-down spectroscopy (CRDS) system comparison

		Thermo Fisher scientific			
		Thermo Scientific OE-FTIR spectroscopy systems combined with Montrose Sensible EDP		Cavity ring-down systems	
\bigcirc	Performance criteria for EtO monitoring systems	Meets new EPA updates to ethylene oxide NESHAP and PID	\bigcirc	Meets new EPA updates to ethylene oxide NESHAP and PID	⊘
	Ease of deployment	Turnkey with fully automated compliance reporting Real time custom alerts	⊘	Integrated system	×
77.	System design and field experience	In-house design and manufacture of full system hardware and software Proven field history since 2019	⊘	Minimal field experience Newly released systems in 2023	X
(Service and support	Team of experienced field service and applications specialists	⊘	Limited installation, service and support capabilities	×
	Robustness	Proven reliability regardless of sample contamination	⊘	High finesse mirrors susceptible to signal loss, especially in hot/wet applications	×
***	Operational costs	Minimal system preventative maintenance	⊘	High cost to upkeep mirrors in CRDS analyzer in addition to system preventative maintenance	×

 $^{^{\}star}$ National Emission Standards for Hazardous Air Pollutants



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^{**} Proposed Interim Decision