

Benzene Module for Fenceline Monitoring

Aeroqual's Benzene module provides continuous sub-ppb benzene measurement for fenceline and ambient applications. Its compatible with the AQS 1 and AQM 65 outdoor product platforms.

Technology

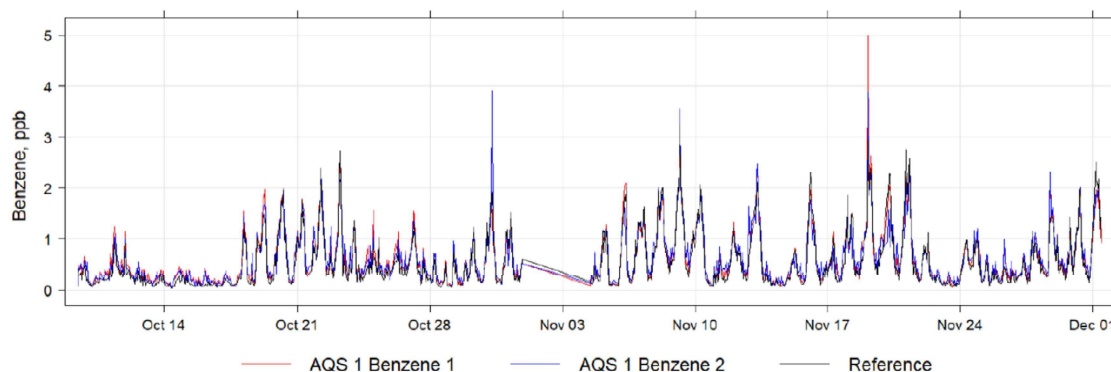
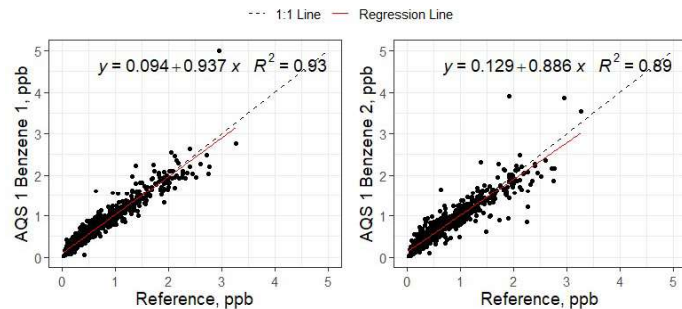
The Benzene module uses a proprietary adsorbent trap and temperature programmed desorption system to separate and quantify benzene for analysis. The detector is a 10.6eV photo-ionization detector (PID). The system uses ambient air as the carrier gas.



Aeroqual Benzene module specification					
Range	Resolution	Noise at Zero	Lower Detectable Limit (3σ)	Measurement Interval	Drift 24 hour
0-100 ppb	0.01 ppb	0.03 ppb	0.1 ppb	15 min	< 0.5 ppb

Field Performance

Two Benzene modules in an AQS 1 were calibrated in the factory and co-located with an Auto-GC at a US site adjacent to an oil refinery for two months. No additional calibrations were performed. The timeseries plot is shown below. The two Benzene modules performed reliably throughout the monitoring period and showed good agreement with the co-located Auto-GC Reference Benzene data ($R^2 = 0.93$ and 0.89 and $MAE = 0.1$ and 0.13 for Benzene 1 and 2, respectively).



For more information about how the AQS 1 can address your benzene measurement challenges contact Aeroqual at sales@aeroqual.com