

PICARRO

Fenceline Monitoring System (FMS)

Picarro's Fenceline Monitoring System leverages 25 years of experience in continuous monitoring and emissions quantification. The system provides accurate, reliable, and defensible data, helping you minimize emissions and meet vital compliance requirements.



KEY FEATURES



Continuous PPT Detection

Industry-leading sensitivity, accuracy, precision, and interference rejection at the part per trillion (ppt) level



Robust Measurement Foundation

Powered by Cavity Ringdown Spectroscopy (CRDS), the system detects a library of over 700 compounds



Automated Operation

Designed for hands-free operation in the field, the system automates calibration, QA/QC, and data collection



Cloud Portal

Secure remote access to your facility's emissions data, enabling alert management, automated reporting, and complete operational oversight



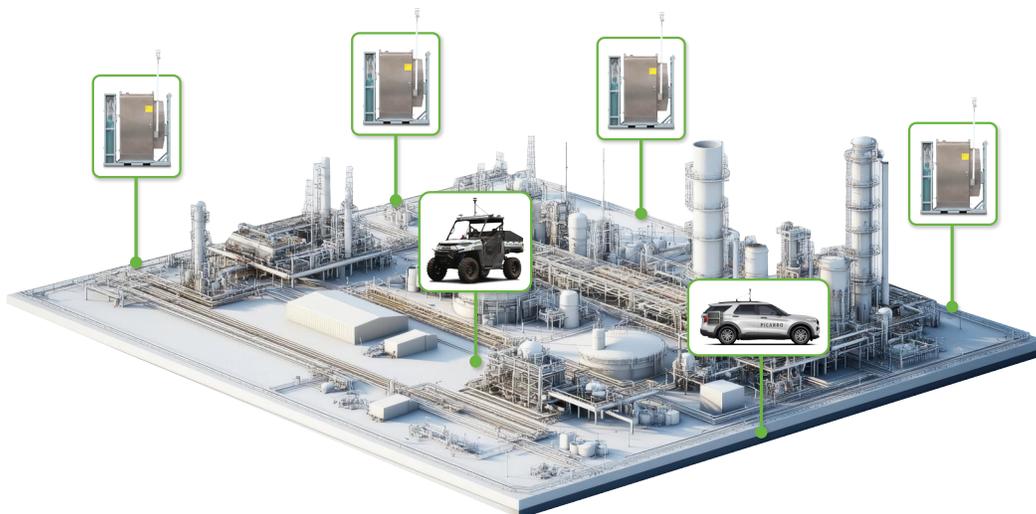
Sub-system Integration

A comprehensive package consisting of analyzers, span gases, anemometers, and control software



Expert Support

Backed by proactive service, compliance guidance, and 24/7 support



COMPREHENSIVE SOLUTION

Designed to meet the latest Hazardous Organic NESHAP (HON), Refinery Sector Rule (RSR), and Chemical Manufacturing Area Sources (CMAS) requirements, the system delivers continuous, defensible data that regulators can trust. Combined with our cloud platform, mobile monitoring systems, and readily-available support, it forms part of a broader solution that keeps facilities compliant year after year. With one integrated approach, you gain clarity on emissions, confidence in compliance, and a clear path to protecting both your facility staff and surrounding communities.

TECHNICAL DATA

Measurement					
Parameter	Ethylene Oxide	1,3 - Butadiene	Vinyl Chloride	Ethylene Dichloride	Benzene
Measurement Technique	Cavity Ring-Down Spectroscopy (CRDS)				
Compliance	EPA Method 301 Validation (HON & MACT CC); Alternative Test Method § 63.184(i) pending EPA approval				
Limit of Detection (LOD)	Compatible with action level requirements for an Alternative Test Method §63.184(i)(3) and §63.658(k)(3)				
Span	<0.037 ppb–1 ppm	<0.45 ppb–1 ppm	<0.39 ppb–1 ppm	<0.33 ppb–1 ppm	<0.94 ppb–1 ppm
Sample Cycle Time	Raw measurement interval: 5 seconds; Compliance measurement interval: 15 minutes				
Automated QA/QC	Auto span, linearity, and calibration drift checks				
Spectral Library	700+ compounds; Automated compound identification; Dynamic spectral fitting				

Installation	
Main Power Supply	240 V, Single phase, 30 A
Power Draw	3600W
Material	Stainless steel chassis
Dimensions (w x d x h)	1778 x 1118 x 3122 mm (70 x 44 x 123 in) with skid dimension
	1778 x 1118 x 3404 mm (70 x 44 x 134 in) with extended air terminal post
Weight	<907 kg (2000 lbs) this weight includes 3 gas tanks weighing approximately 50lbs
Operating Temperature	0 to 45°C
Storage Temperature	-10 to 50°C
Sample Integrity	Heated and filtered sample inlet
Operational Effort	Zero; consumable free sampling design

Gas and Sample Supply	
Reference Gas	System accommodates up to three calibration gas cylinders. Zero air generator (ZAG catalyst)
Calibration Method	Automated MFC-based dilution between 1-100% of Span

Systems Software (Local)	
Features (Single System)	System Control and Operation, Data Acquisition and Storage, QA/QC Scheduling, Role Based Authentication, On-Board Spectral Analysis Toolkit, Alerts and Notifications, Cloud Uplink and Data Buffering

Connectivity	
Cloud Connection	Cellular Modem, Satellite Internet
Direct Connection	Ethernet TCP/IP

Cloud Software (Web-Based)	
Features (Fenceline Network)	Real-time and Operational Dashboards, Compliance Calculations (dC), Reporting (US EPA-CEDRI), Emissions Management and Leak Detection Analytics, Facility Workflows for Root Cause and Corrective Actions (RCA/CA), Alerts and Notifications, Advanced Reporting Tools, Multiyear Secure Data Storage

Supporting Features	
Meteorological Data	MaxiMet GMX500 Compact Weather Station – logging temperature, barometric pressure, wind speed, wind direction
Onboard UPS	Ensures uninterrupted operation during power fluctuations or short outages