



CEREX UV HOUND Analyzer

UV HOUND analyzers are the recognized choice for industrial hygiene, leak detection, HazMat first response, environment contamination and remediation, and indoor air safety monitoring. They specialize in monitoring individual VOCs (such as Benzene, Ammonia, Nitric Oxide, Nitrogen Dioxide, Sulfur Dioxide, and more) without costly, frequent maintenance or environmental interference. Parts per billion level detection limits and simultaneous multi-gas capability in an all-in-one, portable package.

General Specifications

Analyzer	Portable multi-gas point analyzers
Measuring Technology	Ultra Violet Differential Optical Absorption Spectroscopy (UV-DOAS)
Measuring Principle	Beer-Lambert Law
Measuring Technique	Classical Least Squares (CLS) regression analysis; optional Partial Least Squares (PLS)
Multi-gas Capability	Standard configuration is up to 5 compounds; capable of simultaneous analysis of up to 50 compounds
Response Time	User selectable from 5 seconds and up Typical output rates are 30s, 60s, 120s, or 300s Time weighted average available for user defined periods (8 hour, 12 hour, 24 hour)
Minimum Detection Limit	Gas-specific, typical parts per billion
Enclosure Specs	Dimensions 38.12" x 16" x 6.12" (96.8 x 40.6 x 15.5 cm) Weight 55 Lbs (25kg) Material
Applications	Refinery fenceline monitoring of Benzene, Toluene, and Xylenes (BTEX), Brownfield Remediation, Chemical Depot Monitoring, Manufactured Gas Plant Remediation (MGP), Perimeter Ambient Monitoring System (PAMS), Superfund Site Remediation, Tank Farm Monitoring
Installation	Portable or permanent installation within shelter

System Specifications

Power Supply	100VAC to 240VAC, Single Phase 47-63Hz , 4A Max
Power Connection	Environmentally sealed circular Amphenol bayonet connector.
Power Consumption	240W max
Real Time Analysis Software	Cerex Monitoring Software (CMS) Windows® 10, 11 Operating System
Data Connection	USB, Ethernet, Bluetooth, WiFi Access Point and WiFi Station. Remote operable.
Digital Interface	MODBUS, VNC, and remote desktop. Spectral data may be stored locally, on a NAS, or disabled. Industrial external wireless option available. USB-C for data retrieval and peripheral accessories. Cellular capable for full remote access and control from any PC, anywhere.
Sample Intake Rate	80 LPM
Sample Pump	3 meters, with quick connect fitting
Sample Gas Filtration	0.3 Micron
Gas Fittings	Gas Inlet 1/2" Quick Coupling; 1/4" Swagelok test adaptor provided Gas Outlet Case Vent 3/8" OD push-to-connect tube adaptor provided
Sample Cell	Multi-pass, path length 17.0m - 22.0 meters (depending on application)
Spectrometer	Detector Cryocooled MCT Photodetector Spectral Range 2 - 14 µm (microns) Resolution User configurable: 1cm ⁻¹ , 2cm ⁻¹ , 4cm ⁻¹ , 8cm ⁻¹ , 16cm ⁻¹ , 32cm ⁻¹ Best resolution 0.5cm ⁻¹ Scan frequency 6 scans/s @ 32 cm ⁻¹ Source SiC, 1550K Beamsplitter ZnSe Window Material ZnSe Wavelength range 600-4200 cm ⁻¹

Operating Conditions

Battery Life	3.5 hours STD 14.5 Hour Optional
Temperature	0C° to 55C° (Air Cooled Model), or -40C° to 55C° (Thermoelectric AC Cooled)
Humidity	0 - 100% non-condensing
Rain	Direct exposure rated
Dust / Sand	Direct exposure rated
Storage Conditions	General purpose atmospheres - not rated for HAZLOC zones Temperature -40C° to 60C° Humidity Below 80% (non-condensing)
Instrument Cooling	Air cooled (optional thermoelectric air conditioner)
Sample gas pressure	Ambient
Sample gas flow rate	80 LPM

Maintenance

Bulb Life	4000 Hour Manufacturer Warranty
Internal Battery Life	3.5 Hours, optionally to 14.5 hours
Spectrometer	20,000 Hours

Options

Integrated Wind Mapping	Three dimensional ultrasonic anemometer with temperature measurement. Data integrated into CMS data tables and available via MODBUS.
Integrated Data Acquisition	Optional external ports with data integration for particulate or ancillary co-located analyzers (TDLAS laser, electrochemical, etc.).
Data Output	MODBUS over TCP-IP is standard. MODBUS over RS-232, RS-485.
Analog Output	8 channel configurable 0-24mA (4-20mA with extended range)
Alarms	User configurable concentration and TLV average
Additional Sensors	Up to 6 additional sensors (for compounds not available in UV spectrum)

Performance Specifications

Zero-point drift?	Automatic and manual zero point
Sensitivity drift?	
Linearity deviation?	< 2%, Self-Compensating
Temperature drift?	
Pressure influence?	
Background measurement interval?	< 2% FS / 24hr, Self-Compensating
Zero gas?	