

FTIR Environmental Analyzer

The **ANALECT®EVM™** monitor provides round-the-clock multi-point continuous air monitoring for a variety of applications.

- Proven, reliable FTIR technology yields real-time analysis of both organic and inorganic compounds.
- Measures ambient toxic and pollutant gases with ppb to % level detection.
- A variety of user-configurable alarms for instant warnings of toxic gas levels and system control.
- Capable of monitoring 28 components with up to 32 sampling points over a distance of 300 meters from the monitor.
- Rapid response time – typically 20-200 seconds per stream.
- Configurable sample point selection locally or by DCS.
- Communications options including Modbus.® OPC.® Ethernet and analog/digital.
- Closed-loop calibration system supports injection calibration and validation.
- SpectraRTS™ software engineered exclusively for on-line monitoring, allowing use by engineers, maintenance personnel, and chemists.
- Full chemometric modeling capability including SpectraQuant,™ Unscrambler,® MATLAB,® and Pirouette.®
- Applications
 - Monitor ambient air for OSHA compliance for workplace safety
 - Monitor gases for production or unwanted byproducts
 - Low level leak detection of hazardous compounds
 - EPA method 320 HAPS

Benefits of Ambient Air Monitoring With **ANALECT®EVM™**

- Proven reliability of the Transept™ IV Interferometer even in harsh environments
- Rapid response time
- Easily configurable to meet changing measurement requirements
- Calibrations transferable to other EVM monitors



ANALECT®EVM™



SpectraRTS™ Software Drives Your Application

Automate many aspects of your process

- Control I/O to switch valves and monitor a variety of sample system conditions
- Collect spectra and apply quantitative analysis routines
- Transmit product properties, instrument QC data, and alarms via versatile communications protocols Implement calibration tools and programming flexibility
- Apply a wide variety of quantitative analysis routines including: SpectraQuant™, MATLAB® and Pirouette®
- Utilizes Visual Basic for Applications (VBA) compatible scripting language to achieve total programming flexibility
- Operate the system remotely by using pcANYWHERE™ or Timbuktu® software
- Multi-level password access Validate and diagnose your system
- Implement on-line validation methods, such as ASTM D6122
- Automatically monitor and trend the system's "health" with Remote R_x software preventative maintenance scheduling
- Access the on-line help system for quick reference



Specifications

Spectrometer:

- Interferometer: **Transept IV** hermetically-sealed interferometer with refractively scanned design
- Spectral range: Extended mid-IR 7,400 to 450 cm⁻¹;
- Resolution: 1.5 cm⁻¹ (unapodized)
- Detector: DTGS pyroelectric (standard) and full line of external Optibus detectors, including DTGS, thermoelectrically controlled DTGS, MCT, liquid nitrogen cooled MCT (12 and 24 hr. dewars)

Sample Cell

- 10 meter pathlength standard. Other pathlengths optional
- Heated cell prevents condensation and stabilizes measurements.

Ambient Environment Conditions

- Temperature range: 0-95°F
 - Relative humidity range (RH): 95% non-condensing
- Area Classification
- Standard: General purpose
 - Optional: Hazardous areas

Utility Requirements

- Rated voltage: 115/230 Vac ±10%
- Rated load: 2 kVA

Utility Requirements (continued)

- Rated frequency: 50/60Hz
- Nitrogen (N₂): Optical purge 3-5 psi, 0.25-1 SCFM
- Instrument air or N₂: Enclosure vortex cooler
60-100 psi, 5-25 SCFM

Communications

- Standard: RS 232/422 Modbus RTU or ASCII
- Optional: Discrete analog/digital
- Optional: Ethernet OPC
- Optional: Data concentration PC

Physical Dimensions

- Analyzer cabinet size: 75"H x 56"W x 24"D
190cm x 142cm x 61cm
- Weight: 800 lb/360 kg

Experience: – Our staff of applications experts provides feasibility and calibration services that set the world-wide standard. We also provide the systems integration and post-installation support to ensure your success.

