

PRODUCT DATASHEET

EVM™



Real-Time

Accurate

Stable

- 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
- Easily configurable to meet changing measurement requirements
- Calibrations transferable to other EVM monitors

The 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 20-60 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™, SpectraQuant Solo™, 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
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Benefits of Ambient Air Monitoring With EVM

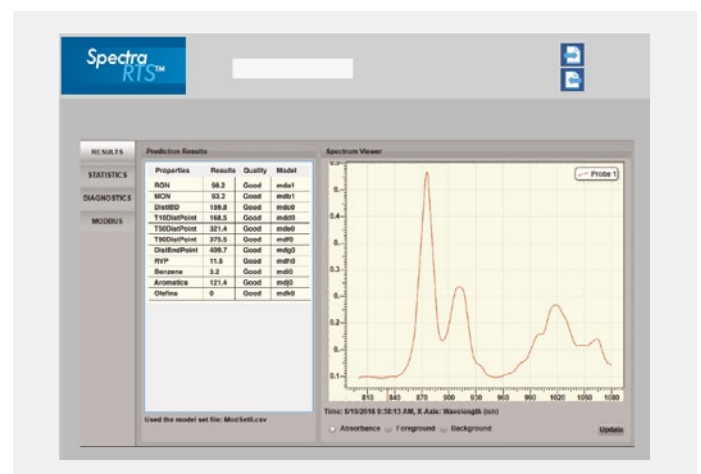
- Proven reliability of the Transept™ IV Interferometer even in harsh environments
- Rapid response time
- Easily configurable to meet changing measurement requirements
- Calibrations transferable to other EVM monitors

Customer Benefits

- Improved plant efficiency
- Enhanced user-friendly operator interface
- Increased production and reliability

SpectraRTS Software Automates Many Aspects of Your Analysis

- 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
- Utilizes Visual Basic for Applications (VBA) compatible scripting language to achieve total programming flexibility
- 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 thermoelectrically controlled DTGS or MCT

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 $\pm 10\%$
Rated load:	2 kVA
Rated frequency:	50/60Hz
Nitrogen (N_2):	Optical purge 3-5 psi, 0.25-1 SCFM
Instrument air or N_2:	Enclosure vortex cooler, 60-100 psi, 5-25 SCFM

Communications

Standard:	RS 232/422 Modbus® RTU or ASCII
Optional:	Discrete analog/digital, Ethernet OPC

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 worldwide standard. We also provide the systems integration and post-installation support to ensure your success.

GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights manufactures and delivers premium sensors, monitors, detectors, analyzers, instrumentation, and software that are mission-critical to keep your operations, personnel, and the environment safe – every day across the globe.

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Process Insights – The Americas

4140 World Houston Parkway Suite 180, Houston, TX 77032, USA +1 713 947 9591

Process Insights – EMEA

ATRICOM, Lyoner Strasse 15, 60528 Frankfurt, Germany +49 69 20436910

Process Insights – APAC

Wujiang Economic and Technology, Development Zone, No. 258 Yi He Road, 215200 Suzhou, Jiangsu Province, China +86 400 086 0106

For a complete range of products, applications, systems, and service options, please contact us at: info@process-insights.com

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REVOLUTIONIZING MEASUREMENT

EVERYWHERE