

MAX-iR™

FTIR GAS ANALYZER

The MAX-iR™ FTIR Gas Analyzer has been engineered to meet the most demanding standards for in-line process, batch sampling, gas purity/certification, environmental emission, and ambient air monitoring. Combined with Max's StarBoost™ technology, MAX-iR™ allows users to **achieve single digit ppb to 10's ppt detection limits while maintaining all of the benefits of real-time FTIR**. This technology breakthrough, available only on MAX-iR™, will eliminate the need for costly GC solutions across a wide variety of applications. Let MAX-iR™ reinvent how you solve your most demanding process gas analysis needs.

MAX-iR™ is built around a small, rugged, high throughput interferometer with 24-bit ADC integrated detector modules that allow for exceptional signal-to-noise without liquid nitrogen cooling. Longevity and reliability of the analyzer has been increased using a long-life VCSEL laser diode and SiC IR source. Integrated temperature and pressure sensors provide increased precision for the most demanding certification applications. Finally, dual level vibrational dampening allows the analyzer to operate even in challenging field environments.

MAX-iR™ is available in a variety of configurations. Users can choose between three detectors and integrated computer/display. All systems come standard with MAX-Acquisition™ and MAX-Analytics™ software that provide industry leading factory integration tools, high speed identification of compounds, and measurement accuracy/stability without the need for calibration.



MAX-iR™ Features

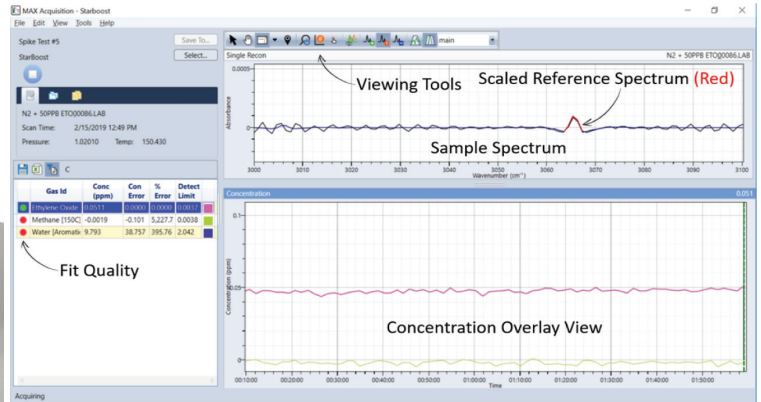
- Real-Time gas analysis (1 sec – 1 min response)
- 1 – 32cm⁻¹ resolution FTIR spectrometer
- 10m high throughput multipass gas cell
- VCSEL laser diode (long life)
- SiC IR source (long life)
- Non-hygroscopic optics (no purge required)
- Precision temperature and pressure sensors
- 5U – 19 inch standard rack

Options

- StarBoost™ upgrade
- DTGS, MCT, InAs detectors
- On-board computer and touch screen
- Analysis methods (factory supplied)

Typical Applications

- Inline Process Monitoring
- Batch Sampling
- Gas Purity Analysis
- Gas Certification Analysis
- Continuous Emissions Testing
- Ambient Air Testing
- Engine (RICE) Emission Testing
- Turbine Testing
- Leak Detection



MAX-iR™ Specifications

- 19 x 24 x 8.75-inch rack mount
- 75 lbs
- 120/240 VAC 50/60 Hz
- Integrated temperature & pressure sensors
- Industry leading FTIR spectrometer
 - ZnSe Optics
 - VCSEL diode laser
 - Silicon Carbide IR Source
- Optional gas cell and detectors
- 10-90 percent humidity non-condensing
- Temperature Range 20-30°C
- Single 1/4" Swagelok™ input/ output
- N2 Purge port (usage optional)

MAX-Acquisition™ Software

- FTIR Configuration & Control
- Real-Time Quantitative Analysis
- ASC-10™ Control
- Thermal Oxidizer Module Control
- Factory Interface Module Control
- ModBus TCP/IP communications
- Sample Collection Workflow

MAX-Analytics™ Software

- Data Validation and Analysis
- Compound Search

MAX-iR™ Optional Hardware

- Gas Cell
- 35 – 191°C (operational temperatures)
- 0 – 5 atm (operational pressures)
- 10 m pathlength - 0.5L volume (std)
- Windows BaF₂, KBr, CaF₂, ZnSe
- Detector
 - DTGS (standard)
 - TE-cooled MCT
 - TE-cooled InAs
- StarBoost™ Filtering (MCT & InAs)
- Touchscreen
- Integrated Computer

Optional Accessories

- ASC-10™ Automated Sample Console
- Thermal Oxidizer Module (TOM)
- Factory Interface Module (FIM)
- 10-channel high purity multiplexer



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