

## Mobile FTIR (CEMS) System

### ***5 simple steps for remote FTIR monitoring from anywhere in the world.***

From on-site setup and installation to remote operation and monitoring, CleanAir's Mobile FTIR (CEMS) system can be deployed virtually anywhere in the world. Our integrated remote FTIR monitoring system includes:

- Setup of temperature-controlled (HVAC) shelter
- Installation of FTIR multi-gas analyzer
- ESC data logger
- Sample delivery system
- Modbus for data transfer

Our custom software integration allows us to stream gas emissions data (by FTIR- based analysis) via Modbus over Ethernet from a rack mount computer to the data acquisition system. This customization eliminates the need for a full-time operational technician and allows for remote monitoring.

A remote cellular connection allows the desktop of our system to be viewed from any Internet connection. This setup also permits us to reliably control all of the sampling valves as well as the calibration/CTS gases and collect new backgrounds as necessary. By performing a daily check from a remote computer, monitoring projects can and have run 30+ days without onsite attendance.

Another key feature of our system is the ability to stream emission data to your distributed control system (DCS) over Modbus. This allows plant operations to incorporate the real time data from the mobile FTIR into their own process monitoring system. Trending analysis can be performed and process modifications made to insure optimal plant performance.

Controlling operational costs and optimizing productivity is more challenging than ever before. For customized solutions to you instrument rental needs call on CleanAir, a global leader in the air quality industry.

#### **Rental and Application Notes**

- Can be used to measure HCl, Ammonia, Formaldehyde, NOx, SO2, CO, H2O, Methane, and many others
- Boilers, Cement Kilns, Gas Turbines, Compressors, Engines, Flares, and others
- Short-term and long-term rentals available
- Onsite setup, technical support, and training available



#### **Specifications**

##### System Includes

- MKS FTIR
- ESC Data Acquisition
- ADI Heated Pump
- In-Line Heated Filter Holder
- 5-Channel Cal Gas Controller
- Rackmount Server with monitor
- Remote monitoring
- Liquid Nitrogen Fill Assembly
- Modbus
- All Systems Controlled within Cabinet
- Power and Heated Sample Line Temperature Fail/Safe
- Power requirements: 480VAC, 20Amps
- Controls up to 300ft of Heated Sample Line
- Optional Regulators with Digital Output
- Optional BlowBack System
- Optional Remote Data Access by CleanAir Engineers
- Optional Calibration Gases
- Optional Spectral Data Analysis
- Optional AK Protocol

For complete technical specifications, visit:  
<http://rental.cleanair.com/mobilehvactfirsystem>